



29 Tips and Tricks for iLife '08 p.74

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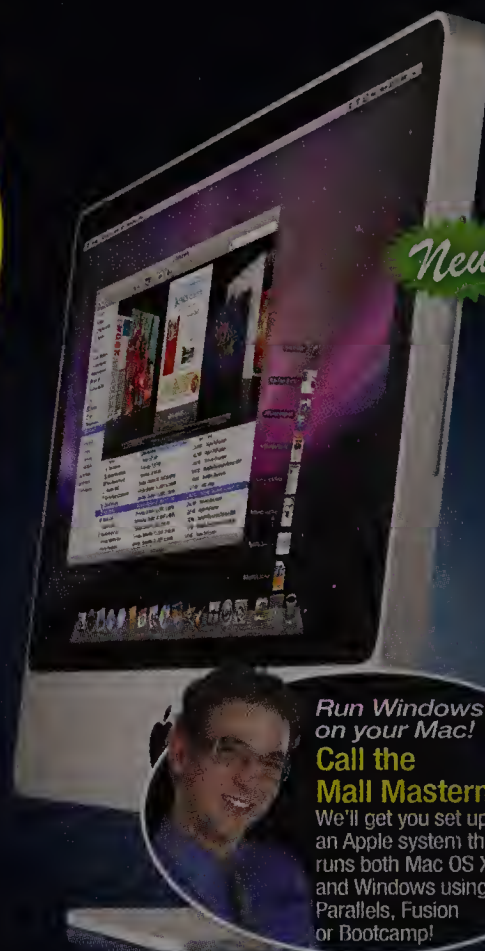


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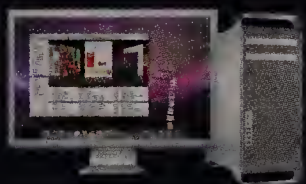
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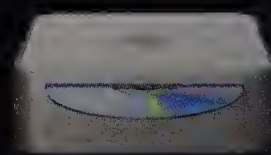
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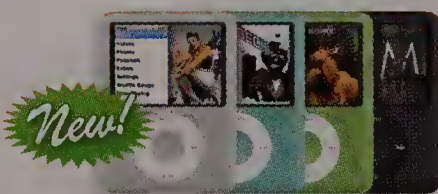


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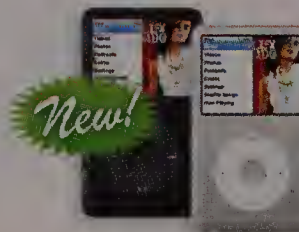


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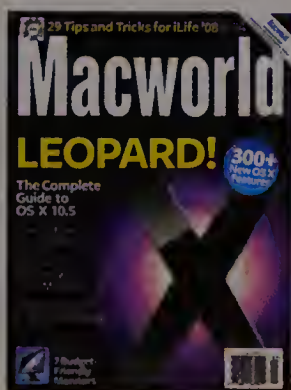
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Monitor photograph by Peter Belanger;
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- 1 Excerpt: Getting Your Mac Ready for OS X 10.5**
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- 2 Apple Releases iPhone Update 1.1.1**
Apple releases the much-anticipated software update for the iPhone, adding several new features (macworld.com/3160).
- 3 Mac OS X Leopard Coming October 26**
Apple announces the date that Mac OS X 10.5 Leopard will be available (macworld.com/3161).
- 4 Apple Update Disables Unlocked iPhones**
After cautioning that updates may disable unlocked iPhones, the company makes good on its warning (macworld.com/3162).
- 5 Apple Acknowledges iMac Freezing Issue**
Apple acknowledges problems with its consumer iMac computer and promises a fix as soon as possible (macworld.com/3163).

(Ranking valid as of October 25, 2007.)

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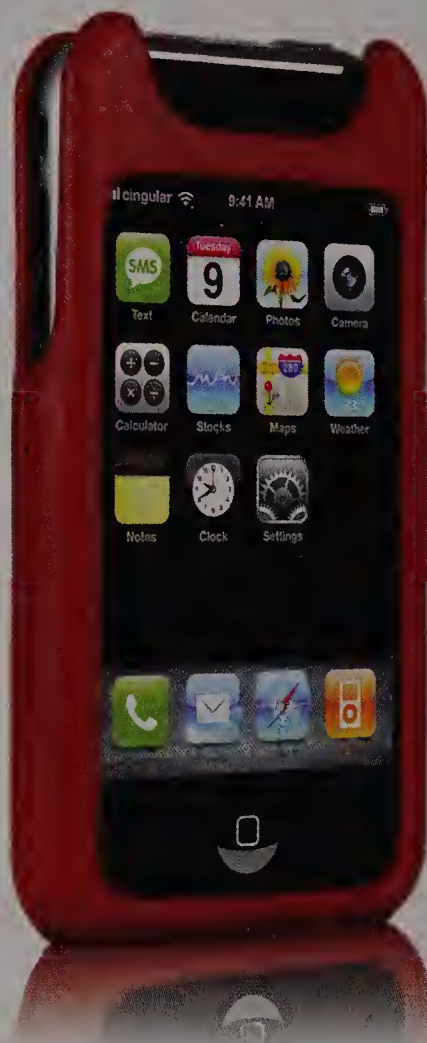


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Making Leopard Upgrade-Worthy

Apple earns your \$129 one feature at a time

In marketing Leopard, Apple doesn't suggest that you should upgrade to the latest version of Mac OS X simply because it's newer than the version you're using now. Nor does Apple try to convince you that Leopard is worth the cost of upgrading simply because it has a bunch of shiny new technologies. Both of those things may be true. But Apple realizes (quite rightly) that Mac users don't automatically upgrade to a new operating system just because the company makes one available.

Two and a half years ago, when Tiger was new, Apple touted its 200-plus new features. Leopard boasts an astonishing 300-plus additions. (For the full list, see macworld.com/3233.) Apple knows that no single Leopard user will ever take advantage of all 300. The company only has to convince you that some subset of them is worth \$129.

Most users won't care about Russian and Polish localizations for Mac OS X—but speakers of Russian and Polish surely will. Almost nobody will purchase Leopard just for AutoFS, a new technology that prevents the Finder from spinning its wheels when it loses contact with a remote file server—but those people in the know will certainly include it on their list of reasons to upgrade.

You can see how Andy Ihnatko does the upgrade math on page 128. For our critical survey of Leopard's major new features, check out this month's cover story on page 54. And at macworld.com/3232, you'll find the results of a "draft" we conducted just before Leopard's release, in which eight *Macworld* editors each picked their ten favorite new Leopard features.

The Main Event

Selling people on tiny features isn't an easy thing. Marketing a product requires a simple message, which Apple creates by adding a few marquee features to the larger collection



Apple realizes that Mac users don't automatically upgrade to a new operating system.

of good new stuff underlying most operating system updates.

In the case of Leopard, Time Machine is one of these marquee features. I can't really argue with Apple's decision there. Time Machine manages to make backing up your data less boring, and I think that's a huge leap forward. I really believe that a few months from now, a majority of Mac users will have fully backed up their data—a far cry from today. And Time Machine's file-rollback system will really change how we interact with our files. Within three days of using Time Machine, I discovered that I was tossing files into the Trash more often, confident that if I really needed one of them, I could retrieve it from my Time Machine backup.

Quick Look, which lets you peer into file contents directly from the Finder, is another of Leopard's game-changing features. It's a simple touch that will make most Mac users more productive. (At least it will as soon as we learn to replace that reflexive double-click with a quick tap of the spacebar.)

In addition to such core features, Apple is marketing the Leopard upgrade with updates to the programs that come with the operating system. Leopard includes improved versions of Mail, iCal, iChat, and numerous other built-in programs that many of us have come to rely on every day.

To my mind, one of the most impressive improvements in Leopard is one that Apple really isn't touting—mostly because it's kind of embarrassing. Spotlight, the technology that lets you find anything on your Mac just by typing a few words in a search box, was one of Tiger's marquee features. But that first version of Spotlight was inflexible and slow. The good news is, Apple has massively improved Spotlight in Leopard. It's more flexible and a *lot* faster.

Then there are the tweaks and fixes scattered throughout the nooks and crannies. For example, Preview (which in some ways Quick Look supersedes) has gained some nice tools for working with PDFs. I'm also pleased with some welcome improvements in security, networking, and other under-the-hood features.

Making the Upgrade

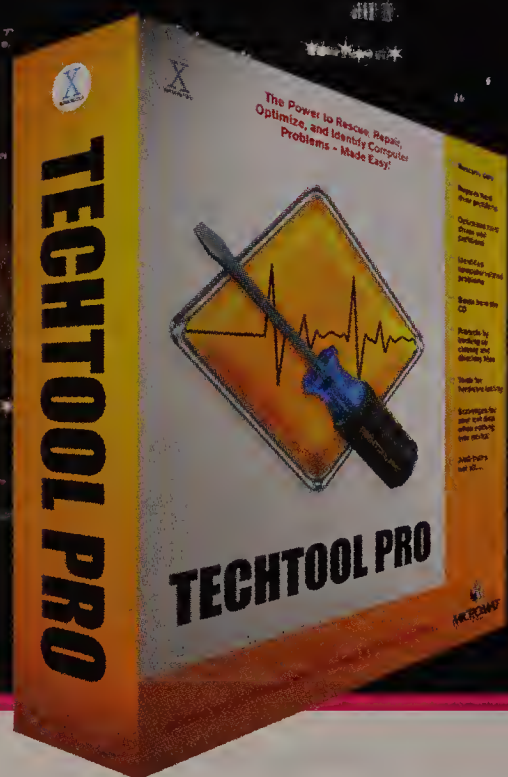
Over the years, Apple has done a fantastic job of packing enough new stuff into its Mac OS X upgrades to get users to buy in. (When I tell people in the Windows world about the speed at which Macworld readers and Mac users in general buy new operating systems, they're shocked. The Windows world is much slower to upgrade.) Given what's in Leopard, I think most active Mac users (and that includes all *Macworld* readers) will find enough to justify buying that upgrade. After all this time, it's fun to have a brand-new cat to play with. ✕

Which Leopard features are calling to you? Have you made the upgrade yet? Join the discussion at macworld.com/forums, or drop me a note at jason_snell@macworld.com.

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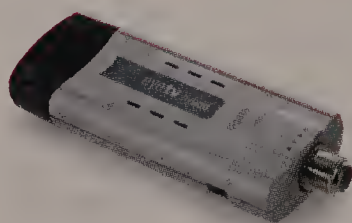
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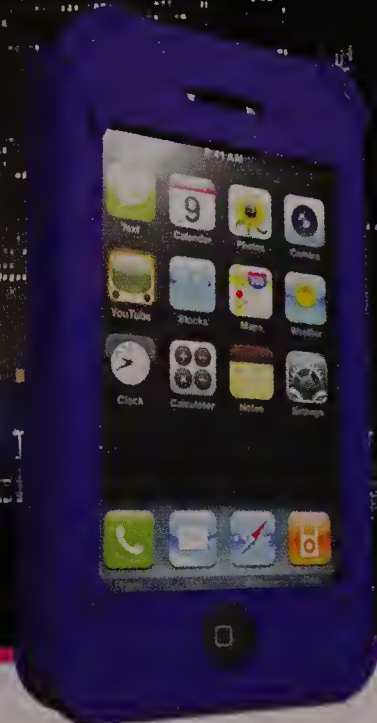


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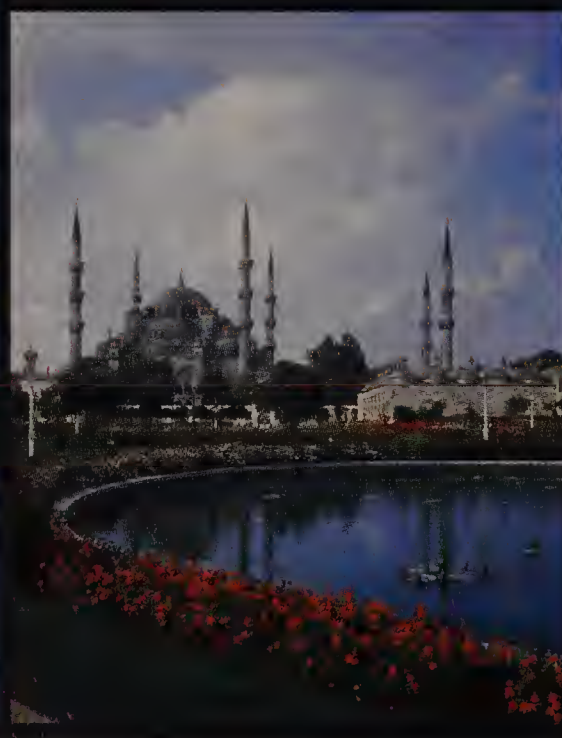
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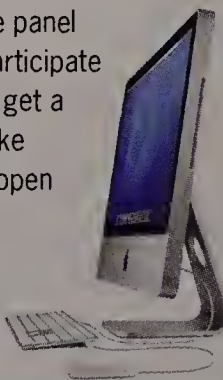
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LEOPARD'S TIME MACHINE WORKS PURRRFECTLY ON NEWERTECH SOLUTIONS



Your Take: iMacs, iLife, and iWork

Plus: What's the best TV tuner for the Mac?

Raking Over New iMacs

Your review of the new iMacs ("The iMac Makeover," October 2007) convinced me to take the plunge and buy a new machine. But when I got my 20-inch iMac home, I was sad to see that the new LCD screen was horrible compared to my old iMac G5's. Colors change if I move my head just a bit from side to side. If I move a box of text from the top of the screen to the bottom, letters change from bold and black to faint and gray. In iTunes, the blue bars that distinguish one song from another are either incredibly dark or practically invisible, depending on their position on the screen. When I took the machine back to the Apple Store, a Genius and I compared my new computer with other 20-inch iMacs. All suffered from similar display problems.

✉ **John Canning**

I have been waiting for the new iMacs, but now that they're here, glossy screen and all, I am so disappointed. What is Apple thinking? Even if the picture on a glossy screen is technically better than on a nonglossy, the glare absolutely destroys the experience. This is a step backward.

✉ **Gary Wickam**



I was hoping to switch from PC to Mac. But after months of anxiously waiting for the new iMacs, I am shocked and disappointed about the glossy screen. It's a deal breaker for me. I can only hope that Apple will hear our complaints and offer a matte display by the time Leopard is released. Otherwise, it may be another Dell with (cringe) Vista for me.

✉ **Susie Funk**

Why the glossy screen? As an amateur photographer, I do not want to see a

reflection of my den superimposed on every picture I view on screen. Do others feel the same way?

✉ **Bill Breiland**

Apparently, yes.—Dan Miller

As pretty as the new iMacs may be, and as decent as their specs are, why, oh why, can't Apple sell a middle-of-the-road Mac without a monitor attached? We have the Mac mini and Pro without monitors. The iMac looks good, but I wish it had a cousin without the big face.

✉ **Philip Murray**

I love, love, love Macs, but your review did not answer one question for me: Do the new iMacs solve the hum problem? Many users of older iMac models have noted a hum—from a fan or hard drive—that travels from the body of the iMac to the desk, which in turn becomes a soundboard emanating a tooth-grindingly annoying noise that can only be drowned out by firing up iTunes. I know two people who've had this problem, and Googling **imac hum vibration** will pull up many more instances.

✉ **Robert Baruch**

While we have certainly heard the anecdotes, we didn't notice any hum on any of the iMacs we reviewed.—Jonathan Seff

OVERHEARD ON THE FORUMS



At the same time that we're bulking up our home screens, we're viewing TV shows [on iPod nanos]. It's like having lunch at McDonald's and dinner at Spago.

lindandtom
macworld.com/3134

When I bought my iPod, I got 20 free songs, from artists I'd never heard of. I bought three CDs based on those 20 songs. I can't be the only one, can I?

zeejay
macworld.com/3135

Does iWork Work?

Numbers is a welcome addition to iWork '08 ("The iMac Makeover," October 2007). Now if only iWork had something like Entourage, which would integrate the functionality of Address Book, iCal, Mail, and Notes or Stickies in one program.

✉ **C. Lee Smith**

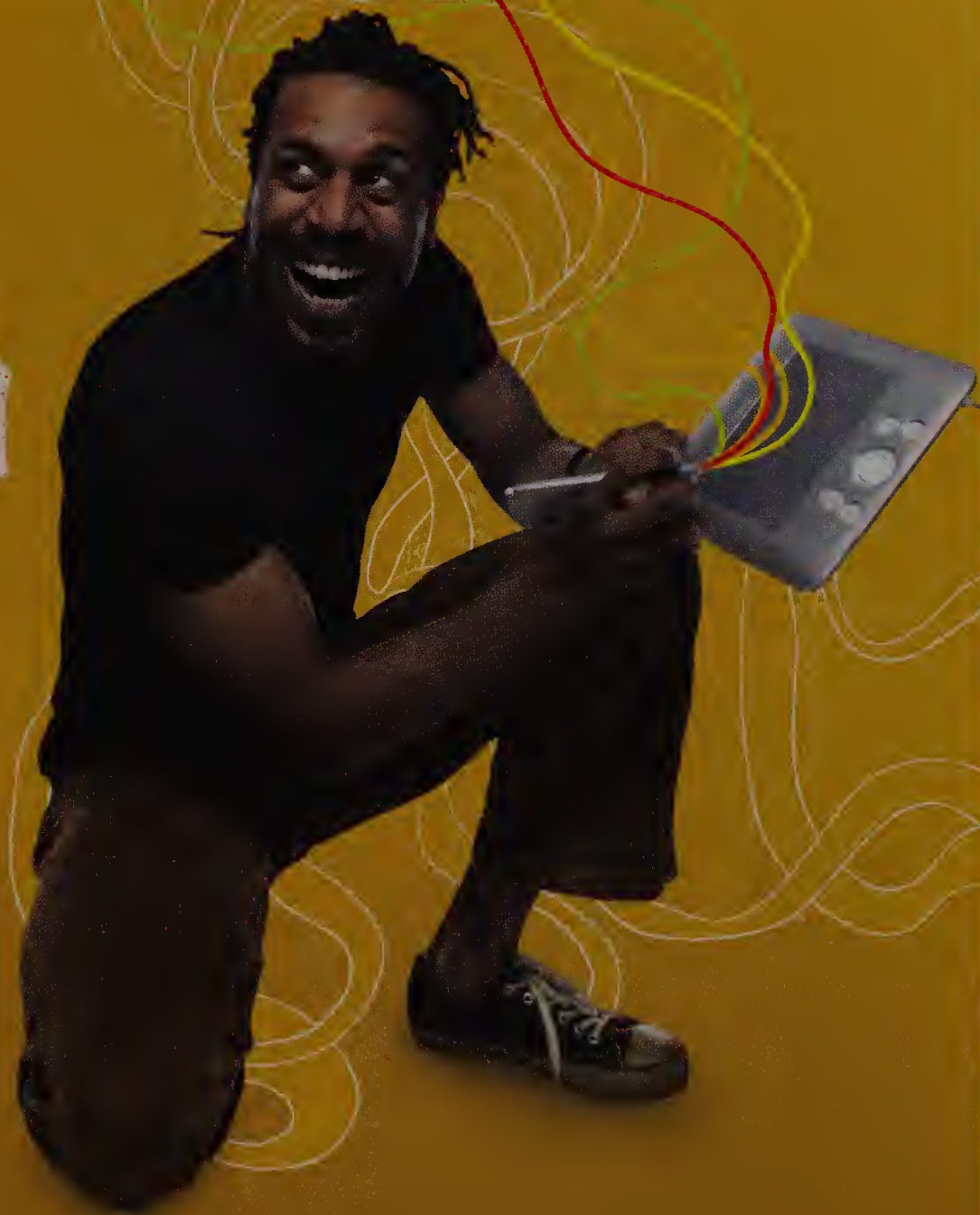
When iWork first came out, I was excited by the prospect of a real alternative word processor. But that first

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version lacked a mail-merge feature, which made it useless for office work. The second version could do mail merges, but only with Address Book. Still useless. Now, the third version of iWork's Pages is out, and it still lacks this fundamental capability.

✉ **Peter Wadsack**

Most home users buy Microsoft Office for one reason only: to read and write Word documents. A few may also use PowerPoint or Excel for simple projects. Now that Pages, Keynote, and Numbers can handle such chores, those users have no need for Microsoft Office.

✉ **Alan Sanders**

I consider your first look at iWork '08 misleading. I'm referring specifically to Pages '08. Whatever its value as a page-layout program, Pages is virtually worthless as a word processor. To start with, it doesn't do endnotes. That makes it useless to many in the academic world as well as to creative professionals whose

work requires endnotes. I'm a former AppleWorks devotee who switched to Mariner Write about a year ago. While that program has some limitations, it's very close to AppleWorks in its clean, simple word processing interface.

✉ **Allan Coleman**

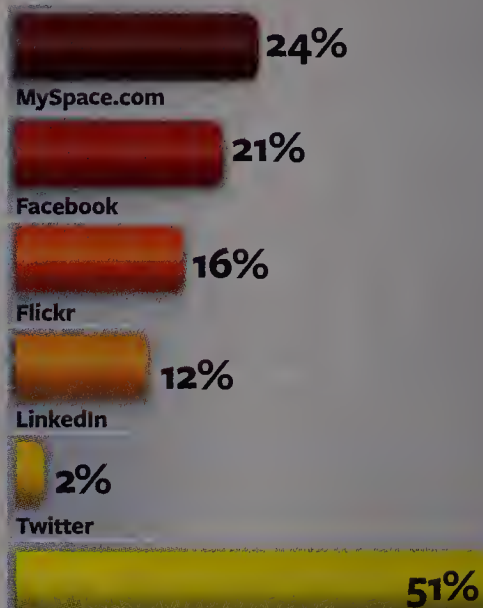
For many of us, the bottom-line question about iWeb is: How well do photos display in the Web pages it creates? So far, I have found iWeb '08 to be a step backward from the last version in this regard. Published photos often look terrible, with unacceptable color shifts. A search of Apple's iWeb discussion pages reveals that I am not the only one to notice this.

✉ **Stephen Wilhelmi**

I've been using Final Cut Pro since version 2, and iMovie since the beginning. In the past, if you learned how to use iMovie, you could move up to Final Cut Pro (or Final Cut Pro Express) without much problem. But if you learn to edit in iMovie '08, you'll never understand Final

READER POLL

Which social-networking Web sites have you visited in the last 7 days?



Source: Karlin Associates

Some respondents visited more than one site in the last seven days.



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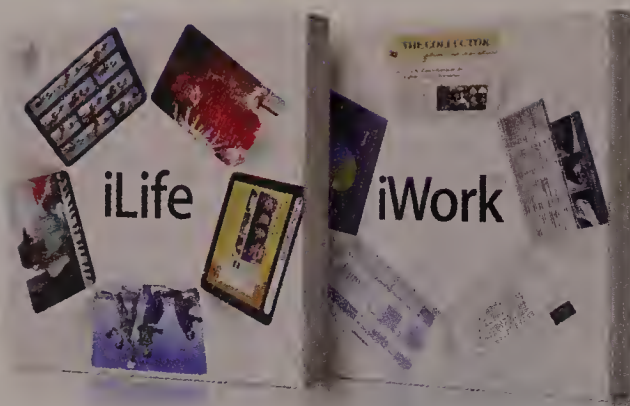
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FEEDBACK



Cut Pro. For one thing, there's no timeline. I talked to Apple support and they said, "This is a new way to edit." What was wrong with the old way?

✉ **Steve Robinson**

After trying the new iMovie and its awesomely handy new features for video editing, I wonder: Why is Apple's Final Cut Pro so uninnovative? It was just recently updated and it can do a million things the new iMovie can't. But iMovie '08 still feels much nicer to use. The new skimming feature makes editing a delight; Final Cut Pro has nothing of the kind. Why? Or why doesn't Apple make a pro version of iMovie?

✉ **Juhana Lehtiniemi**

Regarding iMovie '08: Do I understand correctly that I can keep iMovie HD 6 on my Mac for some applications and have the new iMovie '08 on the same machine for everyday quick-and-dirty video work?

✉ **Dave Hartrum**

You understand correctly. You can also download iMovie HD 6 from macworld.com/0562.—Jonathan Seff

Must-See Mac TV

I was disappointed with *Macworld's* coverage of recording and watching TV on your Mac ("Now Playing," October 2007). I'd like to purchase a device to record TV on my Mac but have been unable to get enough information to make a buying decision. I'd hoped your article would provide it, but it didn't. You focused on using Elgato's EyeTV, but never said why, exactly, and you never compared it directly with other devices, such as Miglia's TV Max+.

✉ **Maggie Johnson**

Our goal was to explain the options you have for watching TV on your Mac, not to do a shoot-out between TV tuners. In that feature, we simply didn't have the space to look at all products in this area (some of which weren't even out then). But we are now reviewing several new Miglia and Elgato products, so please stay tuned.—Dan Miller

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OPERATING SYSTEM

The Importance of Leopard

What's at stake with the success or failure of OS X 10.5? **BY JIM DALRYMPLE**

It's been more than two years since we've seen a major upgrade to Mac OS X, but Apple hasn't been sitting still in that time. The company has the most successful MP3 player in the world and the largest online music store; it has transitioned its computers to Intel chips; its iPhone is changing the cell phone market; and its software continues to pressure the competition. In the midst of all this success, just how important is a new Mac OS X release?

According to industry analysts, OS X 10.5—Leopard—is a critical part of Apple's overall strategy and an important part of the company's other successes (see "Leopard Lands," page 54, for our in-depth look at the latest OS).

"Mac OS X is key to Apple's message of the integration of hardware, software, and services," says Ross Rubin, the director of analysis at market research firm NPD Group. "Given the focus on integration, it's easy to lose track of the components of that strategy. Without the Mac OS, the computer is just a pretty Windows machine."

JupiterResearch vice president and research director Michael Gartenberg agrees: "It isn't quite as flashy in a year that brought us new iPods and the iPhone, but it's no less important."

How Do You Measure Success?

Measuring the success of an operating system is not as easy as measuring the success of something like an iPod or an

iPhone. While some people will purchase Leopard, others have waited to purchase a new computer with Leopard preinstalled. In that case, Leopard is a factor in the Mac buying decision, which makes tracking it much more difficult. All told, Apple says it sold 2 million copies of Leopard in the first weekend.

NPD's Rubin says there are a few ways to judge the success of an operating system. You can look at the sales of boxed retail copies. You can look at the percentage of the customer base that has upgraded after a certain period of time, which would include new hardware sales. Finally, you can look at the

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3174

number of third-party developers that create programs to take advantage of the platform.

Looking at Apple's operating system sales historically offers some insight into how Leopard might fare in the next couple of months. According to NPD Group's retail point-of-sale data, looking at the first two months after each OS's release, Apple sold 30 percent more unit shipments of Tiger than it did of Mac OS X 10.3 Panther, and 100 percent more than 10.2 Jaguar (for more on OS sales, see "Tech Trends," page 32).

Those numbers include only boxed copies, however, and don't take into account any version of the operating system that shipped on a desktop or laptop—and Apple is selling more Macs than ever. Also, Apple has a lot more retail locations now than it did during

smooth process. Good or bad news with OS upgrades gets people talking—and the word of mouth could be good for Apple.

"Apple controls the hardware and technologies like FireWire, which helps when upgrading," says Rubin. "Generally, upgrading versions of the Mac OS has been far less complex than upgrading from, say, [Windows] XP to Vista."

How about the Features?

When it comes down to it, nobody is going to buy a piece of software just to put money in Apple's pocket. We all want some value for our \$129, and analysts think that we're getting it with Leopard.

Some features, however, are there as much for show as for anything. Take the new Dock in Leopard—it doesn't really do anything different, but it looks



"Leopard isn't quite as flashy as an iPhone, but it's no less important."

the launch of any previous operating system, giving users greater access to viewing and purchasing the software. On Leopard's October 26 release date, Apple Stores saw big crowds waiting to get their hands on the new OS.

Targeting Vista

Apple enjoys poking fun at Microsoft, pointing out how the Mac had many features long before Windows acquired them. While that's fun, everyone knows there is no way Leopard will outsell Vista. Microsoft enjoys a huge share of the market, and is upgrading businesses and selling directly to vendors who resell Vista to customers buying new computers. However, the comparison with Windows is still important for Apple.

"It's an obvious benchmark for [Apple] and it's one they allude to often," says Rubin. "This is an interesting upgrade because it's the first one to launch on Intel. There is a sense that the Intel transition made the Mac more attractive to Windows users—this upgrade really allows those users to experience a Mac upgrade for the first time."

For the most part, upgrading the operating system on a Mac is a pretty

different. That's important. When prospective customers walk through the door of an Apple retail store, they want to see right away that there are changes. The revised Dock and the 3-D look-and-feel of the latest operating system offer one way to achieve that.

"Visual changes are something that helps Apple long before it helps the users," says Rubin.

Gartenberg says appearance also helps distinguish OS X from Vista. "It was important for Apple to add features like Cover Flow and Time Machine that are visibly different than what you can get on Vista."

However, features like Time Machine are more than just flash and glitz—they actually do an important job. That's something to consider, with many Windows users coming over to the Mac after years on a PC. Time Machine is certainly a more intuitive and entertaining way of presenting data backup.

"Apple does a really good job of making very good and easy tools to attract users," says Forrester Research analyst J.P. Gownder.

Jim Dalrymple is Macworld.com's news director.

NEWS IN BRIEF

Apple Sells Record Number of Macs

Previously, when Apple announced its 2007 fiscal third-quarter earnings, the company posted a then-record quarter for Mac sales by selling 1.7 million units. The fourth quarter's tally of nearly 2.2 million Macs eclipses that figure by 400,000. Those record Mac sales, combined with ongoing iPod sales growth and the first full quarter of iPhone sales, helped deliver another strong financial performance for Apple. The company said that it tallied a \$904 million profit on revenue of \$6.22 billion for the three months ended September 30, 2007. Laptop sales continue to be an important segment for Apple, with the MacBook and MacBook Pro representing 62 percent of all Macs sold during the quarter.



MacBook Updated

Apple made a few improvements recently to its consumer-targeted MacBook, which is now available with a 2.2GHz Intel Core 2 Duo processor on the high end (up from a 2.16GHz Intel Core 2 Duo). At the same time, the frontside bus has increased to 800MHz from 667MHz, and MacBooks can now handle up to 4GB of RAM (the RAM still runs at 667MHz). Finally, Apple updated the graphics card to the Intel GMA X3100, which shares 144MB of memory with the system RAM—previous models included the Intel GMA 950, which used 64MB. On this MacBook's keyboard, Apple has added media controls to the function-key row, and has replaced the Apple symbol (⌘) with the word *Command* on the command key (see our review at macworld.com/3224).

For high-end users, Apple also added a 2.6GHz Core 2 Duo processor and a larger hard-drive option for built-to-order MacBook Pro systems.



SOFTWARE

iWork versus Office

Apple's suite is doing well, but it won't displace Microsoft's

Apple's iWork '08 includes improved word-processing and presentation tools, as well as a new spreadsheet program—closing in (at least on paper) on Microsoft's Office suite. But according to research data from NPD Group, although iWork '08 is a strong seller, Microsoft has little to fear for its January 15, 2008, release of Office 2008.

NPD's data shows that iWork currently holds 16 percent of all office productivity program sales, with Microsoft taking the rest. Although the company calls that sales figure a "success for Apple," NPD doesn't feel the number will be sustainable after the Office launch.

"A lot of customers are happy with their version of Office," says Chris Swenson, the director of software industry analysis at NPD Group. "That doesn't mean iWork isn't doing well, but it's hard to displace Office, which has been there for so many years."

Tim Bajarin, the president of consult-

ing firm Creative Strategies, agrees. "If you look at Office," he says, "it's still pretty entrenched" among business and education users.

With cross-platform concerns a primary issue, for example, many businesses don't consider alternatives to Office and don't care much about the price difference (\$79 for iWork versus

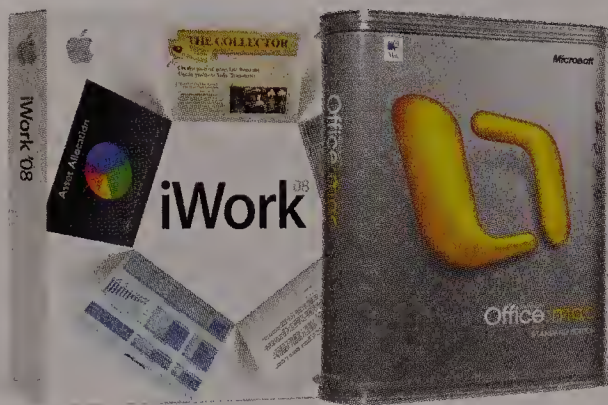
\$400 for Office).

"It's not so much about buying a cheap product or buying Office," says Swenson. "It's whether I keep using the existing version of

Office or upgrade—Microsoft is essentially competing against itself."

The areas where price is a factor are with students, home users, and small businesses (Microsoft will sell its Office 2008 Home & Student Edition for \$150). However, Swenson says, Microsoft does a good job of cutting the prices of these versions of Office at critical selling times to maximize sales.

—JIM DALRYMPLE AND PHILIP MICHAELS



GAME BUZZ

Eve Online Comes to the Mac

CCP Games has released a Mac version of Eve Online, its massively multiplayer online game (MMOG) set in outer space. The Intel-only game costs \$20 for the first month, and \$15 for each month after that. Eve Online is superficially a space-trading, exploration, and combat game in which players pilot spacecraft and travel between solar systems. But the single, persistent online universe that all players share and the player-run economy add some twists to Eve that make it a very deep and somewhat daunting experience for new players, even those who have experience with other MMOGs (for our primer, go to macworld.com/3223).



E for All Draws Big Crowds

The debut of the gamers' trade show known as Entertainment for All (E for All) Expo drew an estimated 18,000 attendees to the Los Angeles Convention Center in October 2007. While the now-defunct E3 Expo focused on attracting the attention of industry buyers and top-tier media, E for All—a new event created by IDG World Expo (which, along with Macworld's publisher, Mac Publishing, is owned by IDG)—focuses on attracting the interest of gamers. More than 70 exhibitors showed off games such as Guitar Hero III, Metal Gear Solid 4, Rock Band, and Super Smash Bros. Brawl. Pleased with the turnout, the show's coordinators plan to repeat the event in 2008.—PETER COHEN



WIDGET OF THE MONTH

Tomatometer 1.2

Looking to take in a flick? Type the movie title into Matt Comi's Tomatometer widget (payment requested) to see what percentage of movie reviewers have given the film a "fresh" review (as opposed to a "rotten" one). Click on the movie's title and you're off to Rotten Tomatoes' detailed Web page for the film (www.bigbucketblog.com).—DAN FRAKES



PRODUCT WATCH

HARDWARE

i-F3, from Sonic Impact Technologies (www.sig.com): Portable iPod speakers feature a dock station and a built-in alarm-clock function (\$170).

PowerLite Home Cinema 720, from Epson (www.epson.com): LCD-based projector features a 16:9 aspect ratio, displays images at up to 1,600 ANSI lumens, and projects 720p native content (\$1,299).

PV2265w, from PhotoVu (www.photovu.com): 22-inch LCD digital picture frame features native 1,680-by-1,050 resolution (\$1,299).

XRackPro2, from GizMac Accessories (www.xrackpro.com): Server rack line adds built-in air-filtration system and is available in 12U and 25U models (12U: \$1,900; 25U: \$2,350).

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MAC BEAT

BUSINESS

iTunes Store Happenings

Changes keep things lively at Apple's media store



Seems like there's always something going on at the iTunes Store—here is some of the big news from the past few months.

> Not long after Amazon.com began selling music with no digital rights management (DRM) restrictions via its AmazonMP3 section, Apple dropped the price of its 256-Kbps DRM-free AAC music from \$1.29 to 99 cents a track, the same amount it charges for 128-Kbps songs encoded with its FairPlay DRM technology. The move brings Apple's pricing closer to that of Amazon.com, which sells DRM-free music for 99 cents or less (see "Dealing with Digital Rights," *Playlist*, page 90).

While Apple has relied solely on EMI to provide it with DRM-free music, Apple says that more variety is on the way. "We're adding over 2 million tracks from key independent labels, and we look forward to even more labels and artists making their music available on iTunes Plus," says Tom Neumayr, Apple's senior manager for iPod, Apple TV, and iTunes public relations.

> One of the most popular bands of all time recently made its music available at online music retailers including iTunes. No, *still* not the Beatles—but as of November 13, you can purchase Led Zeppelin's entire music catalog as full albums or à la carte downloads. Led Zeppelin has sold 300 million albums worldwide, and will surely increase that number with digital distribution. "The addition of the digital option will better enable fans to obtain their music in whichever manner they prefer," said guitarist Jimmy Page in a statement.

> Speaking of the Beatles, Apple seemingly moved one step closer to including the group with the addition of George Harrison's music catalog—completing the availability of the Fab Four's solo material. All Harrison's albums have been remastered, and some include bonus tracks. With John, Paul, George, and Ringo now gracing the virtual halls of the iTunes Store, can the Beatles be far behind?

—JONATHAN SEFF

DIALOG BOX

"When an individual makes a copy of a song for himself, I suppose we can say he stole a song."

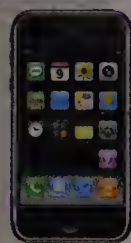
Sony BMG head of litigation Jennifer Pariser

"Let me just say it: We want native third-party applications on the iPhone."

CEO Steve Jobs, on Apple's upcoming software development kit for the iPhone

"We will do some buying of companies that are built around open-source products."

Microsoft CEO Steve Ballmer



SOFTWARE

KeyCue 4.0, from Ergonis Software (www.ergonis.com): Menu shortcuts utility now offers clickable commands and Leopard compatibility (\$28; upgrade, free).

TextExpander 2, from SmileOnMyMac (www.smileonmy.com): Customizable typing-shortcut utility adds features for organizing, sharing, and syncing snippets (\$30).

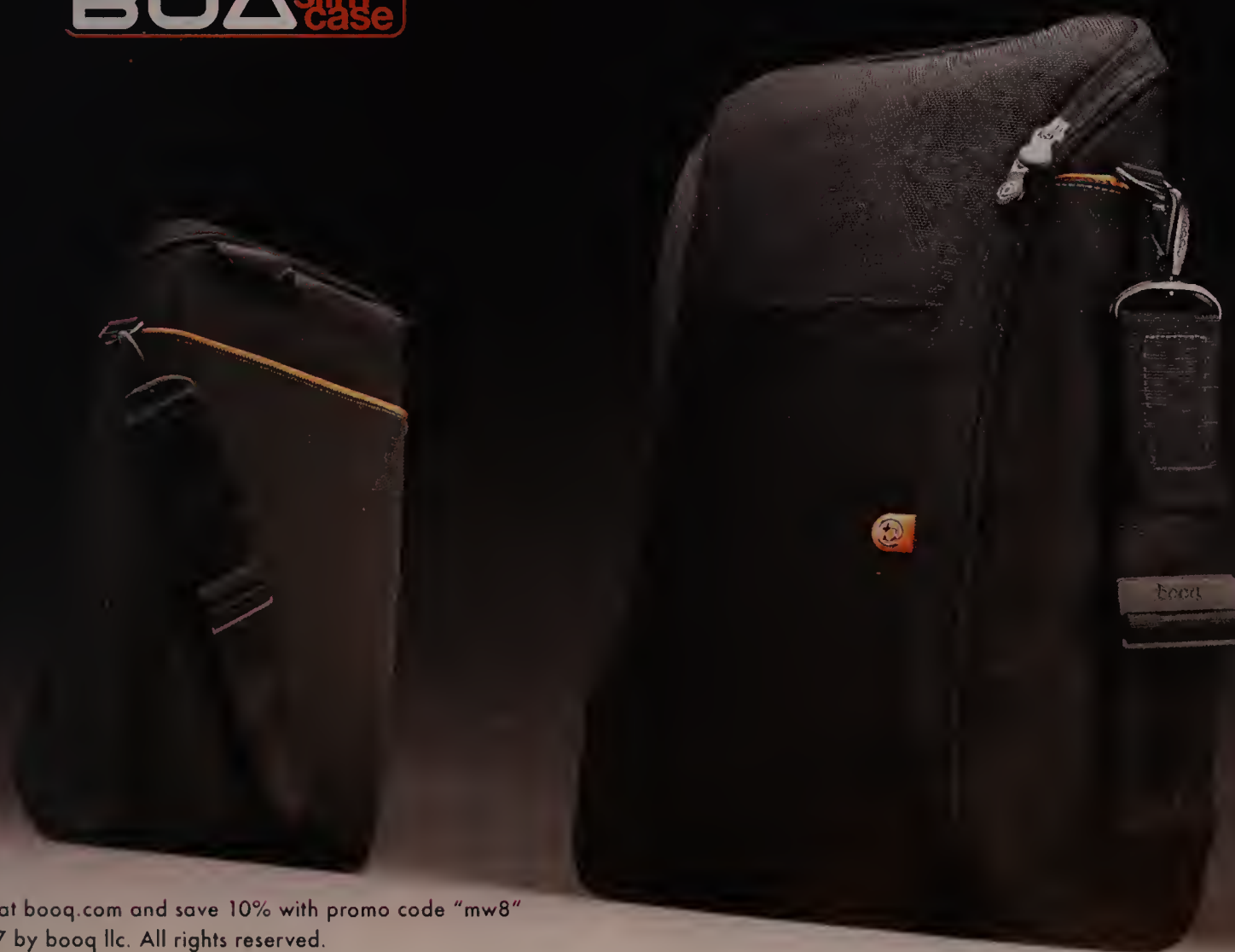


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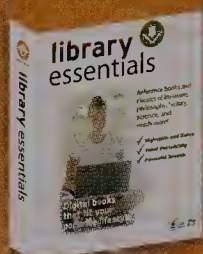
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MAC BEAT

LEGAL

Who's Suing Apple Now?

The latest in legal woes

When you're a large company like Apple, lawsuits are just a part of doing business.

Having deep pockets can lead to fending off frequent filings, and Apple has billions in cash these days. Here are two of the lawsuits currently aimed at the company from Cupertino.

The Case

David Bitton, a law student in Montreal, filed a class-action motion in Quebec (Canada) Superior Court when he discovered that his new 8GB iPod nano really only had 7.45GB of space.

Does It Have Merit?

Apple explains on iPod boxes and its Web site that the actual formatted capacity of iPod is less than the full amount. Yet hard-drive maker Seagate recently settled a lawsuit about advertised versus actual capacity, offering 5 percent cash back or a free software bundle to those people who had purchased its hard drives during a six-year period.



The Case

California resident Timothy Smith filed a class-action suit against Apple, alleging that the company has violated antitrust law with the iPhone by prohibiting its use with carriers other than AT&T (and by *bricking*—or disabling—the phones of those who unlocked them themselves). The suit is asking the court for an injunction against Apple to keep the company from selling the iPhone with any sort of software lock that limits its use to AT&T's wireless network.

Does It Have Merit?

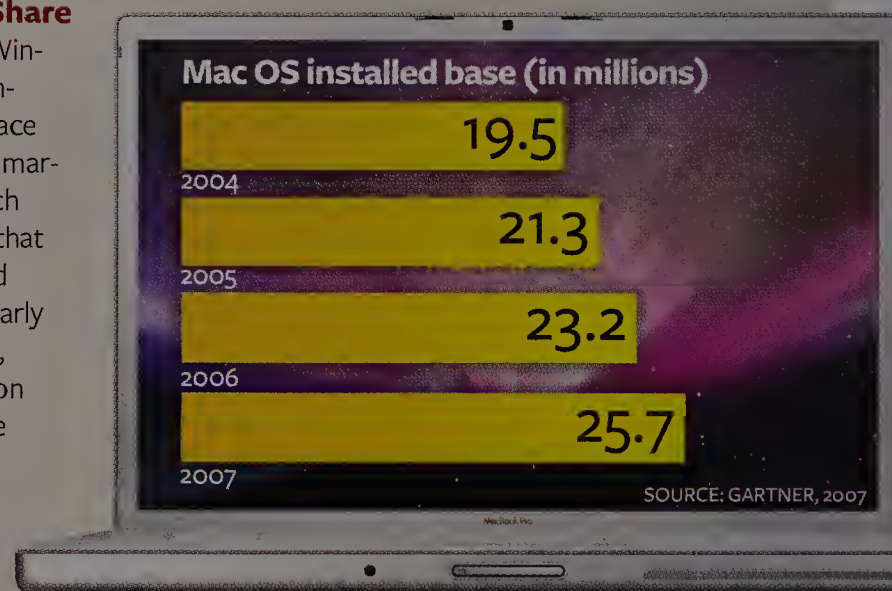
Smith's attorney says Apple is in violation of the Cartwright Act, a California antitrust law that makes it illegal to restrict commerce, prevent competition, or enter agreements to lessen competition. Does locking the iPhone to AT&T's network fall under that definition? Hard to say, but Apple isn't the only company to sell phones locked to a particular carrier.—JONATHAN SEFF

TECH TRENDS

Mac OS Market Share

Yes, at 95.7 percent, Windows still holds a commanding lead in the race for operating system market share. But research from Gartner shows that the Mac OS's installed base has grown by nearly one-third since 2004, though it lost a fraction of market share in the process. Perhaps Leopard will improve those numbers.

—MARYANN JONES THOMPSON





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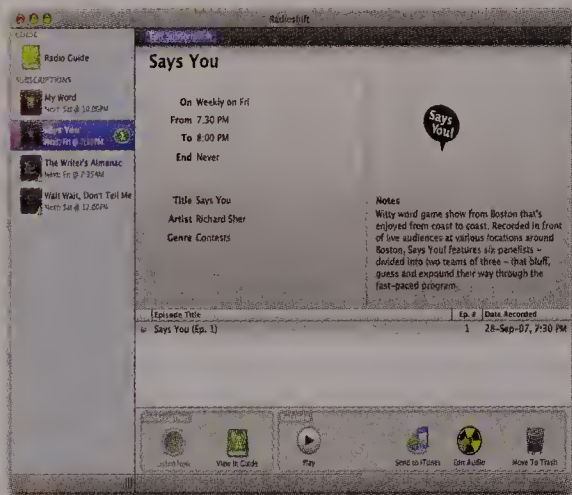
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Hot Stuff

What we're raving about this month



Radioshift

They say video killed the radio star, but Rogue Amoeba's new \$32 Radioshift aims to bring back the dead by applying the ease and simplicity of TiVo to radio. Taking advantage of the vast number of radio streams on the Net, Radioshift is a DVR-like program for your radio-listening habit. Search for and locate a station or show, and Radioshift lets you subscribe to it with a single click, scheduling and recording it in the background whenever it airs. Integration with iTunes allows you to transfer your recordings to your iPod, and a nifty map feature finds results geographically. Radioshift has built-in QuickTime and MP3 support, and installing additional components enables it to work its magic with Real Player and Windows Media, too

(www.rogueamoeba.com).—**DAN MOREN**

Debut III / Phono USB

Digitizing your LPs isn't a simple task: just to get started you need a turntable and some way to connect it to your computer, but many people with old vinyl collections no longer have a working player. The easiest solution is an inexpensive turntable with a built-in USB connection, but people who are serious about sound quality recommend using a high-quality turntable and a good USB phono preamp instead. Pro-Ject Audio System's \$450 Debut III/Phono USB offers the best of both approaches by combining Pro-Ject's acclaimed Debut III turntable with the company's new PhonoBox II USB phono preamp in a single, high-quality package that connects directly to your Mac for recording. And if you plan on keeping your vinyl around, you can use the Debut III/Phono USB with your home stereo as well (www.sumikoaudio.net).—**DAN FRANKS**



Iris

Maybe you don't worry that someone might be using your computer when you're not around. For the rest of us, that's where Mild-Mannered Industries' \$30 Iris comes in. Using your computer's iSight, Iris can act as a motion detector, alerting you when some nefarious element has touched your Mac. The Gallery window features thumbnails of all the movies and pictures you've taken, along with options to e-mail them, post them to Flickr, or convert them for iPod, iPhone, or Apple TV (www.mildmanneredindustries.com).—**DAN MOREN**



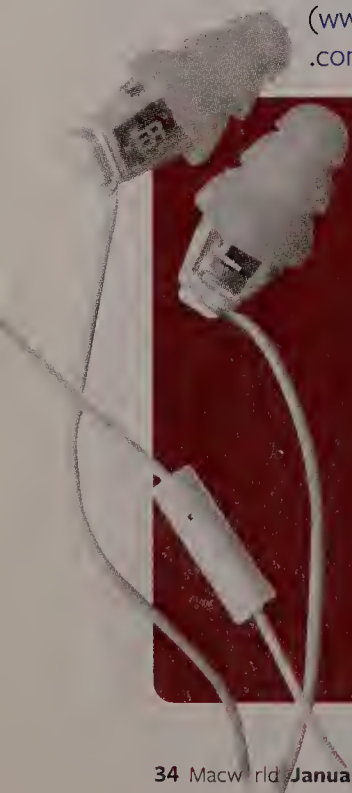
Clyde City

The problem with most laptop bags is that they don't give you much room for anything but your laptop. Messenger bags give you plenty of room for other things, but often don't sufficiently protect your computer. If you want it all in one bag, Acme Made's \$100 Clyde City is an affordable solution. Constructed of durable, high-quality nylon, the Clyde City is a medium-size messenger bag with a variety of pockets and compartments for your everyday demands, including a padded, internal laptop pocket wide enough to fit a 17-inch MacBook Pro. The design is sexy yet modest, and the outer shell is waterproof, making the bag suitable for a multitude of settings, whether you wish to bring it to work, to a café, or on a hiking trip (www.acmemade.com).—**BRIAN CHEN**



Ultimate Buds

With the right adapter, you can use any headphones with the iPhone. However, upgrading your audio quality also means losing the simple but useful inline remote and microphone bud provided on Apple's iPhone earbuds. Ultimate Buds offers a unique solution: the company grafts the headphone cable from the iPhone's stock earbuds onto a set of high-quality, in-ear-canal headphones. You can choose either Etymotic's ER-6i model (which offers impressive detail) or Future Sonics and Xtrememac's FS1 (perfect for listeners who want more bass). The resulting \$150 hybrid gives you basic phone and audio-playback control, an inline microphone for phone calls, and significantly better sound quality and noise isolation than the iPhone's stock earbuds. You can also send the company your favorite headphones and your own iPhone earbuds; it'll perform the cable transplant for \$40 (ultimatebuds.com).—**DAN FRANKS**



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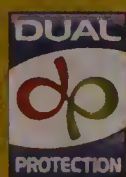
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Reviews



Wide-Screens within Reach

Seven displays that won't stretch your budget **BY JAMES GALBRAITH**

It's inevitable. Over time, prices on today's high-end products will come down, and these high-end offerings will eventually become tomorrow's entry-level products. As Steve Jobs recently put it—while explaining the iPhone's surprisingly quick price drop—“This is life in the technology lane.” Price drops are generally a good thing for all but the earliest adopters of the latest technologies.

Macworld first rounded up 20-inch LCD monitors in the August 2003 issue. The displays had an average price of over \$1,600, well out of the reach of most Mac users. What a difference four and a half years makes. The seven models in this review—BenQ's FP202W V3, Dell's E207WFP, Envision's G2016wa, Hewlett-Packard's w2007, NEC's MultiSync LCD205WXM, Samsung's SyncMaster 206BW, and ViewSonic's VA2026w—are all very affordable. In fact, most of them cost less than \$300. This is well below what

a typical 15-inch display cost three years ago. All the monitors featured here have a wide-screen aspect ratio, whereas only Apple's 20-inch Cinema Display offered the wide-screen 16:10 design in our 2003 review.

On the Surface

All seven of these displays are black with silver accents, and they have thin bezels. A thin bezel gives a more

ver-colored case it fits within. This split allows for the attachment of HP's Easy Clip accessories to the display. I got a chance to try out these accessories. For \$18, you get two photo holders, one flower vase, and a headset holder; they all snap into the gap between the front and back of the screen. It's a pretty cute set, I guess, but I don't think I'd really use them, and I found the split, uneven design a

The seven models in this review are all very affordable. In fact, most of them cost less than \$300.

seamless appearance when you're using multiple displays side by side. All but the HP model have side bezels about three-quarters of an inch wide. The HP has a strange, split-case design: the 1.5-inch-thick black frame is both wider and shorter than the sil-

bit distracting without these accessories attached.

Most of the displays have their menu buttons on the front, so it's easy to adjust details like color, contrast, and brightness. The exceptions are the Samsung and BenQ monitors. The

HOW WE RATE

OUTSTANDING: ★★★★★ VERY GOOD: ★★★★ GOOD: ★★★ FLAWED: ★★ UNACCEPTABLE: ★

Samsung's buttons are on the bottom, but the descriptive icons for them are on the front, just above the buttons, making the settings easy enough to adjust. The BenQ, though, has both the buttons and the icons on the right side of the display, so you either have to turn the side of the display toward you or crane your head around to the side of the display to see which buttons to press. And to make matters worse, the menus appear on screen, so you need to shift from the side to the front when making adjustments, which can be frustrating. This design may give the BenQ a clean and simple appearance from the front, but it does so at the cost of convenience.

All of these budget monitors are relatively inflexible in terms of physical adjustments; their simple, hinged bases offer only limited tilt angles. None of the monitors allow you to rotate to portrait orientation, but the NEC had the most moves, with a swiveling base and a two-hinged stand that made it the only display to allow a few inches' worth of height adjustment.

From Plug to Play

Each display has ports for two inputs: a digital DVI port and an analog one. Having two ports allows you to share the display between two computers. Plus, the dual ports ensure that the display will be compatible with both newer computers that ship with DVI and older computers that provide only analog-out connections. DVI provides a clearer signal than an analog connection, with less noise and less need for signal adjustment. All Macs have been shipping with

DVI ports for a while now, so DVI is most likely the port you'll want to use for your main connection.

All of these displays lack many of the bells and whistles found on more-expensive monitors. For example, none offer USB or FireWire hubs, which are convenient for people whose tower computers sit under a desk, or whose laptops have a limited number of available ports. And none of them offer component- or composite-video ports for connecting gaming consoles or external video sources. Nor do they include flash memory card readers, a feature some displays have offered for years. Three of these models—the Envision, the HP, and the NEC—do include integrated speakers. All three sound better than the built-in speaker on the Mac Pro, though that isn't saying much. The NEC's speakers offer the best sound quality of the trio, but none of these models would beat a \$30 set of external speakers. The HP speakers are, curiously, located on the back of the display. While this design streamlines the front of the display, it also directs sound away from you. That might be OK if you work alone—or have a wall directly behind

Double Vision

TIP Are you considering using two displays? If you own a Mac tower, you have it easy because your graphics cards have two ports; you're already set up to add a second display. Mac laptops have one port for adding an external display. MacBook Pros and PowerBooks have full-size DVI ports, making it a snap to add on a monitor. MacBooks and iBooks require a special cable that connects their mini-DVI port to the display; Apple sells one for \$19. iMacs have one full-size DVI port for adding a second display. The Mac mini has only one DVI port, which limits you to a single monitor. There is another solution, however: Matrox's DualHead2Go Digital Edition (macworld.com/3133) is an external box that allows you to share one DVI port with two displays. But at \$229, it doesn't come cheap.

your monitor that the sound can bounce off—but if you work in a high-density or open setting, your neighbors may not be

NEC MultiSync LCD205WXM ▶



PROS: Integrated speakers; adjustable height; very good text legibility and color fidelity.

CONS: Limited viewing angle, expensive.

PRICE: \$362

COMPANY: NEC Display Solutions, www.necdisplay.com

FULL REVIEW: macworld.com/3130



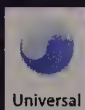
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REVIEWS Wide-Screens within Reach



Envision G2016wa, Dell E207WFP,
BenQ FP202W V3

I like shiny screens, but I know the reflection does bother some people.

very happy about your new monitor's rear-facing speakers.

Another HP design decision that may influence potential purchasers is its glossy screen. I like shiny screens. They make blacks appear blacker, adding dimension to photographic images. You'll see some reflection in a shiny screen, though, especially in dark areas. Although I think the trade-off is worth it, I know the reflection does bother some people.

Turn-Ons and Turn-Offs

One of my pet peeves is the way almost all display manufacturers set their displays to crank up the brightness and the blues and the reds by default when you attach their monitors to your computer. This strategy is designed to help their monitors stand out from the crowd when on display at a retail store. Sure, the monitors look bright and colorful, but if you leave them at this

default setting, you'll be in for a surprise the first time you try to print something and the colors don't match what you see on screen. Each one of these monitors suffers from this problem and requires calibration. It's hard to say which display looked the worst straight out of the box, but the Envision was the best. I used the Eye-One Display 2 from Gretag Macbeth (macworld.com/3136) to calibrate each display to the sRGB color space, with a gamma of 2.2. After calibration, the grays, which had previously been very blue, were much more neutral, and highlights in lab-test images were less blown out.

The Macworld Lab has a number of color test images, but the main image is a picnic scene, featuring objects whose colors a viewer will be able to instinctively judge as being accurate or not without having to see the object in person—things like fruit, vegetables, certain skin tones, and wood grain.

BenQ FP202W V3



PROS: Inexpensive.

CONS: Limited viewing angle; location of menu buttons on the side of the display makes adjustments and menu selection difficult.

PRICE: \$285

COMPANY: BenQ, www.benq.com

FULL REVIEW: macworld.com/3126



Dell E207WFP



PROS: Very good text legibility and color fidelity; inexpensive.

CONS: Limited viewing angle; low contrast ratio.

PRICE: \$269

COMPANY: Dell, www.dell.com

FULL REVIEW: macworld.com/3127



Envision G2016wa



PROS: Integrated speakers; inexpensive; good color out of the box.

CONS: Limited viewing angle.

PRICE: \$239

COMPANY: Envision Monitors, www.envisiondisplay.com

FULL REVIEW: macworld.com/3128



HP w2007



PROS: Shiny screen; integrated speakers; inexpensive; very legible text.

CONS: Reflections on shiny screen may bother some users; rear-facing speakers could be problematic; limited viewing angle; no custom color controls.

PRICE: \$260

COMPANY: Hewlett-Packard, www.hp.com

FULL REVIEW: macworld.com/3129



Nearly all of the monitors did a fine job of displaying accurate color, except the HP, which had some difficulty displaying dark reds—the tomatoes and red peppers in the picnic scene looked blotchy. Its output was almost like that of a low-resolution ink-jet print.

What if you don't have calibration hardware like the Eye-One? Though it worked really well, this \$250 piece of calibration equipment costs about as much as the monitors in this review. Without it or something similar, you'll have to adjust the monitor yourself. The displays vary in the amount of control they give you over image adjustment. The HP, for example, provides no controls at all for changing color. The NEC and the ViewSonic allow you to choose from the usual range of Kelvin temperatures: 9300 Kelvin, 7500 Kelvin, and sRGB. They also have a user mode that lets you choose the red, blue, and green values. The Samsung and Envision models simplify things by labeling the presets Cool, Normal, and Warm, with an additional Custom setting that allows you to choose

RGB values. The BenQ gives you Normal, sRGB, Movie, Dynamic, and a User mode for custom RGB settings. The Dell offers sRGB as the standard color setting, but it also gives you Red and Blue presets, as well as a configurable User mode. With all but the HP, I was able to use the monitors' manual color controls to get colors to look pretty good.

The Fine Print

Text was legible on all the displays, even at small point sizes; five of the seven earned Very Good ratings from our jury. The other two, the BenQ and Envision models, received Good designations from our jury; the BenQ's text appeared oversharpened and a bit broken, and the Envision's text looked slightly blurry and blocky.

The View from Here (and There)

Our final juried test measured viewing angles. If you look at their specifications, all the displays declare a viewing angle between 160 and 170 degrees. That sounds pretty good, until you realize that

Samsung SyncMaster 206BW



PROS: Very good text legibility and color fidelity.

CONS: Limited viewing angle; expensive.

PRICE: \$350

COMPANY: Samsung, www.samsung.com

FULL REVIEW: macworld.com/3131



ViewSonic VA2026w



PROS: Very good text legibility; relatively inexpensive.

CONS: Limited viewing angle.

PRICE: \$285

COMPANY: ViewSonic, www.viewsonic.com

FULL REVIEW: macworld.com/3132



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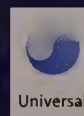
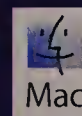


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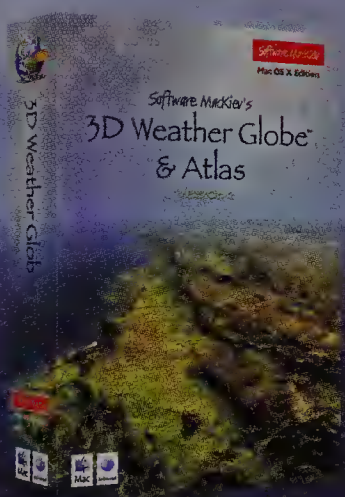
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REVIEWS Wide-Screens within Reach

Shopping for an LCD Monitor

There was a time when reviews like this one would require a full page of LCD versus CRT comparisons. Since consumer CRTs have pretty much vanished from both physical and virtual store shelves, such a comparison is no longer necessary. If you're going to buy a monitor, it's almost certainly going to be an LCD. To assist you on an LCD shopping trip, here is a breakdown of the specifications you're likely to encounter.

Viewing Angle

Listed in degrees, this specification describes the area in front of the screen that is viewable before the contrast ratio drops below 5 or 10 percent, depending on which percentage the vendor uses in its tests. Many display manufacturers claim that you can view the screen anywhere from 70 degrees all the way up to 90 degrees to the left or right of center. But that doesn't guarantee you won't experience major color shifts and a loss of contrast, which can make the screen pretty much unusable at these extreme angles. Since this specification is almost meaningless without some context, you should attempt to test-drive a monitor before buying it if your work involves gathering coworkers around your display for collaboration purposes. On the other hand, you may prefer a narrow viewing angle. Some companies even sell privacy filters that severely limit a display's viewing angle to prevent others from seeing your screen.

Response Time

Listed in milliseconds, response time describes the amount of time a display takes to turn a pixel from off to on and back to off again. (Some manufacturers use a gray-to-gray response time, listing the amount of time it takes for a pixel to go from one shade of gray to another and back—making direct comparisons difficult.) A display

with a long pixel-response time can have trouble keeping up with moving images, such as those in games or movies, and might show smeared images or ghosting effects. These days, most displays have very fast response times. While a response time of 25ms used to be respectable, it's not anymore. The seven models in this review all boast response times of 5ms or less. You won't see much difference between 10ms and 5ms, but if a display has a response time of 20ms or more, it may have problems keeping up with on-screen action.

Inputs

These days, most LCD panels ship with multiple ports: at least one DVI port for making a digital connection, and one analog port for connecting via an older format—namely, VGA. Multiple ports allow you to share a display between more than one computer—a Mac and a Windows machine, for example. However, analog connections require that the digital video signal from your Mac be converted to analog; the display must then convert that analog signal back to digital. These conversions can introduce errors. For that reason, the display's on-screen menus contain extra tools for correcting the problems that arise in analog mode. Some displays ship with two DVI ports, which are handy if you want to share the screen between computers but don't want to have to decide which gets the better connection. Finally, though none of the displays reviewed here have them, some LCD monitors are beginning to ship with digital HDMI ports, which are most commonly found in high-definition consumer electronics products. ViewSonic's high-end VX2435WM display, for example, uses HDMI instead of DVI and includes an HDMI-to-DVI adapter cable for connecting to your Mac.

Size and Resolution

LCD monitors come in a dizzying array of sizes. It may be better to shop by resolution instead. Resolution determines the amount of data you'll be able to view on screen. Size determines how large that data appears to you. All displays with the same aspect ratio—all standard-size displays, for example—that are between 17 and 19 inches share the same resolution (1,280 by 1,024); therefore, you can't see any more of your Excel spreadsheet on a 19-inch display than you can on your 17-inch one. The physical size of the text will be a little larger on a 19-inch, because the pixels have a little more elbow room—or lower pixel density. The same can be said of 20-inch, 21-inch, and 22-inch monitors. They all share the same pixel resolution (1,600 by 1,200), but the pixels are spread out across a greater area on the larger screens.

Wide Screens

Many displays these days are taking a cue from Apple and the television market by using a wide-screen, 16:10 aspect ratio. It turns out that for a lot of people, this wider design is more efficient than the standard 4:3 aspect ratio most monitors use. The extra width allows you to fit more documents side by side and still have room for palettes. You may not be able to see as much of a long Microsoft Word document on a wide-screen display, but you can more easily have multiple Word documents open on screen. Whether a wide-screen or a standard aspect ratio is better for you depends on how you like to work.

Glossy or Matte

Over the past few years, a trend has developed: glossy screens are increasingly replacing the matte, glare-resistant screens that most LCDs employ. Some people are very



sensitive to glare and are therefore leery of using a glossy screen. The best thing about a glossy screen is the way the color jumps out at you. Darks appear darker, giving depth to photographic images. It might be a good idea to try out a glossy screen before purchasing one. I've used glossy-screen desktop monitors, laptops, and iMacs, and I prefer them to matte displays.

Brightness

Most displays have a brightness rating, listed as cd/m^2 (candelas per square meter), ranging from 250 to 400. All the displays in this review are rated at 300 cd/m^2 . Some displays, such as Apple's 23-inch and 30-inch Cinema HD monitors, boast 400 cd/m^2 . But even at 300 cd/m^2 , I had to lower the brightness on all the displays to avoid overblown highlights—and to save my eyes.

Contrast Ratio

The contrast ratio specification refers to the difference in brightness between full brightness and black. If a display puts out 300 cd/m^2 at full brightness and 0.3 cd/m^2 when displaying black, monitor vendors divide 300 cd/m^2 by 0.3 cd/m^2 to get a 1,000:1 ratio. Some display manufacturers measure *dynamic* contrast ratio, in which the monitor analyzes the signal and adjusts the backlight to create even higher contrast ratios.

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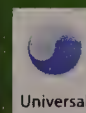
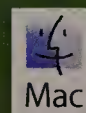
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REVIEWS Wide-Screens within Reach

Disposing of It Properly

TIP If you're replacing an old monitor—and you don't want a two-monitor setup—you can try to sell your old monitor on eBay, donate it to a local school or charity, or recycle it responsibly. Macworld's April 2007 feature, "Saying Good-bye to Your Mac" (macworld.com/3138), has a lot of handy tips for getting rid of your unwanted tech gear. For example, TechSoup.org maintains a database of organizations that will take your donated monitor. You can even search by zip code to find a donation site nearby.



Clip-Ons HP's Easy Clip accessories (sold separately) hold items you want to keep close at hand.

the specification is defined as the angle where the contrast ratio drops below 5:1 or 10:1—depending on how the monitor vendor measures contrast ratio. Considering that all of these displays offer up to a 1,000:1 contrast ratio when viewed straight on, you can see what a large

drop in contrast you get when you move your head from the front of the monitor to the extreme left or right, or up or down. So yes, you can see an image on screen from those wide angles, but it won't have the same level of detail as what you can see when sitting in front of the display, and the color might be radically different. The ViewSonic produced the most color distortion of the bunch. Grays turned a tobacco-stained brownish yellow, blues turned purple, and whites

20-Inch LCD Monitors Compared

	BenQ FP202W V3	Dell E207WFP	Envision G2016wa	Hewlett-Packard w2007
RATING	★★★	★★★½	★★★	★★★
PRICE	\$285	\$269	\$239	\$260
PERFORMANCE				
VIEWING ANGLE	Fair	Good	Fair	Fair
COLOR FIDELITY	Good	Very Good	Good	Good
TEXT LEGIBILITY	Good	Very Good	Good	Very Good
SPECIFICATIONS				
SIZE (IN INCHES)	20.0	20.0	20.0	20.1
NATIVE RESOLUTION	1,680 × 1,050	1,680 × 1,050	1,680 × 1,050	1,680 × 1,050
CONNECTIONS	analog and DVI	analog and DVI	analog and DVI	analog and DVI
HORIZONTAL VIEWING ANGLE	140 degrees	160 degrees	160 degrees	160 degrees
BRIGHTNESS	300 cd/m²	300 cd/m²	300 cd/m²	300 cd/m²
RESPONSE TIME (IN MILLISECONDS)	5	5	5	5
CONTRAST RATIO	1,000:1	800:1	3,000:1	1,000:1
DIMENSIONS (HEIGHT × DEPTH × WIDTH, IN INCHES)	15.6 × 6.7 × 18.9	15.0 × 5.7 × 18.6	15.0 × 8.3 × 18.6	15.6 × 7.3 × 19.3
SPEAKERS	no	no	yes	yes
WARRANTY	3 years	3 years	3 years	1 year

We connected the display to a 2.66GHz Mac Pro with 1GB of RAM and an Nvidia 7300GT graphics card, running Mac OS X 10.4.10. We noted the performance of the display with its default, out-of-the-box settings and then calibrated it to 6,500 Kelvin with a gamma of 2.2, using a Gretag Macbeth Eye-One Display 2 colorimeter. The Macworld Lab viewed a number of on-screen test images and rated each display as Superior, Very Good, Good, Fair, or Poor on its color, text, and viewing angle compared with a sampling of similar displays. —MACWORLD LAB TESTING BY JAMES GALBRAITH



Hewlett-Packard w2007, Samsung SyncMaster 206BW, ViewSonic VA2026w

tended to become dim and pink, which didn't make the picnic test image look very appetizing.

Measuring Response Time

Over the years, many *Macworld* readers have urged me to report on each vendor's response-time specifications in my display reviews. But it can be difficult to make direct comparisons of response times (see "Shopping for an LCD Monitor," on page 40). Response time is

defined as the amount of time in milliseconds (ms) that it takes for a pixel to go from off to completely on to off again. Some vendors cite a gray-to-gray response time, which theoretically measures a more real-world experience. LCD monitors used to have pixel response times of longer than 25ms; this meant action on screen was sometimes accompanied by ghosting or smearing as the pixels struggled to turn on and off in sync with the motion in a movie or a video game. All the displays reviewed here—save the Samsung, which uses a gray-to-gray response time—boast a 5ms response time. When we viewed movies, games, and even a Pong screen saver on each display, all of them were able to keep up with the on-screen action.

Macworld's Buying Advice

Twenty-inch wide-screen LCD monitors are just about perfect for most computer users. They are inexpensive and take up relatively little desk real estate. The roomy, wide screen lets you easily view documents side by side, with space left over for palettes. And though the seven displays reviewed here are very similar, the NEC's swiveling height-adjustable stand, very good text legibility, built-in speakers, ease of use, and customizable color controls make it the best of the bunch. However, if price is your biggest concern—and you can live without integrated speakers and height adjustment options—the Dell E207WFP is a good choice, and costs nearly \$100 less. ❌

James Galbraith is *Macworld*'s lab director.

NEC MultiSync LCD205WXM	Samsung SyncMaster 206BW	ViewSonic VA2026w
★★★★ TOP PRODUCT	★★★★	★★★
\$362	\$350	\$285
Good	Fair	Fair
Very Good	Very Good	Good
Very Good	Very Good	Very Good
20.0	20.0	20.0
1,680 × 1,050	1,680 × 1,050	1,680 × 1,050
analog and DVI	analog and DVI	analog and DVI
170 degrees	160 degrees	170 degrees
300 cd/m ²	300 cd/m ²	300 cd/m ²
5	2 (gray to gray)	5
1,000:1	1,000:1	1,000:1
14.2 × 10.2 × 18.6	15.6 × 8.6 × 18.7	16.1 × 8.9 × 18.6
yes	no	no
3 years	3 years	3 years

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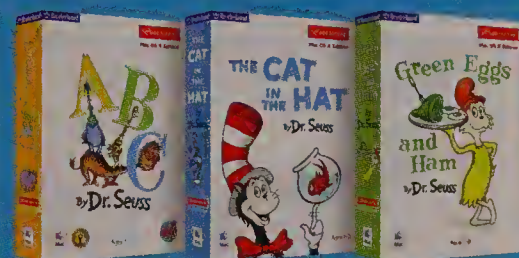
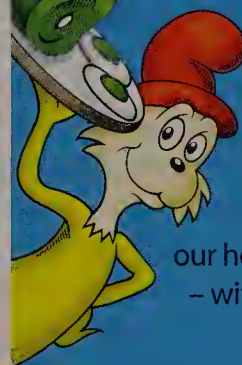
Ages 2-8



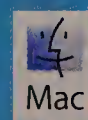
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macworld.com/reviews

What we're reviewing online this month



SOFTWARE

Chocolatier △

RATING: ★★★★★ **PRICE:** \$20 **COMPANY:** PlayFirst

URL: www.playfirst.com

Chocolatier is a strategy game with arcade elements—a business simulation that takes place in the late-Victorian era. You're a young candymaker, tasked by the great chocolate maker Evangeline Baumeister with restoring her family's name. The Baumeister clan has suffered ill fortune of late, after Evangeline left her errant younger sister to run the company. The Baumeister recipes, coveted throughout the candy-making world, have been scattered to the four corners of the earth, and it's your job to recover them. Chocolatier is a delightfully challenging business-tycoon game with some sweet twists and turns. Definitely check this game out (macworld.com/3170).

FirstEdge 3

RATING: ★★★★★ **PRICE:** \$99 **COMPANY:** Acclivity

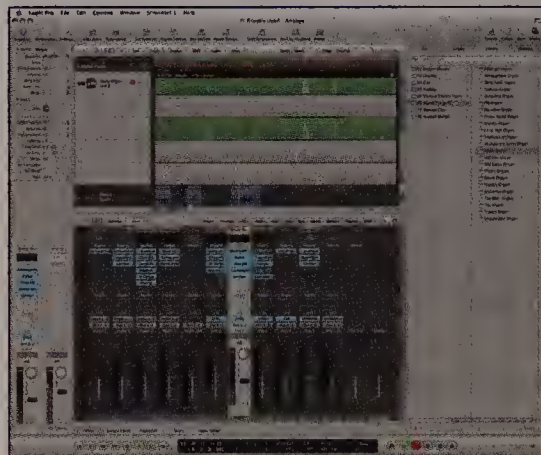
URL: www.myob-us.com

MYOB's FirstEdge 3 is a best-of-class small-business accounting application that gives you excellent features at a great price. This version doesn't offer much in the way of major new features—most of those that have been added are enhancements to existing tools, such as Address Book contact syncing—but the software has been

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updated as a Universal program. While form customization can be frustrating, it's unlikely to interfere with how well FirstEdge handles your business finances (macworld.com/3173).



Logic Studio △

RATING: ★★★★★ **PRICE:** \$499 **COMPANY:** Apple

URL: www.apple.com

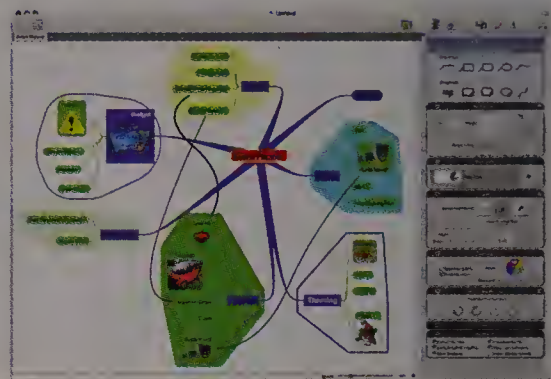
Digital audio workstations have to do a lot: they typically record, mix, and edit audio; host instruments and effects; record and edit MIDI; arrange music; score videos; print notation; slice and stretch sound loops; and even provide programmable drum machines, acoustic simulators, and surround sound. It's easy to get immersed in all those features and lose track of actually making music. With new features constantly being added, is anyone cleaning house? Apple is. With Logic Studio, Apple has transformed Logic from a deep but difficult program into one of the most streamlined and elegant music environments of its kind (macworld.com/3180).

NovaMind 4 Pro

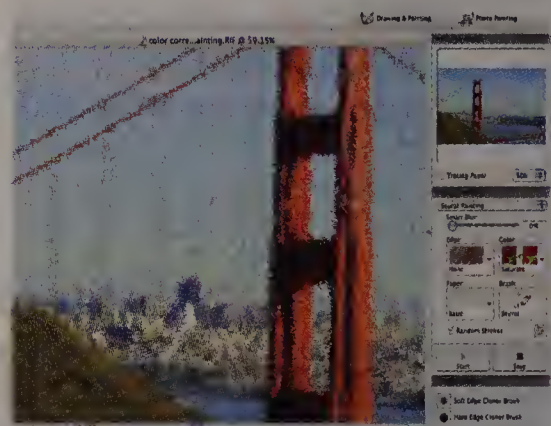
RATING: ★★★★★ **PRICE:** \$149 **COMPANY:** Nova-Mind

URL: www.nova-mind.com

Mind mapping is a form of visual outlining that helps you get a better overview of your projects, open your mind when brainstorming, take notes, and organize disparate ideas easily. NovaMind 4 Pro is one of the most graphically advanced of these mind-mapping tools. If you're just getting into this method of organizing ideas, you may find the graphics options overwhelming. But the ability to create



templates is a boon for people who use mind maps regularly, and if you take the time to discover all of the program's graphical options, you'll be able to make a template that perfectly suits your style (macworld.com/3172).



Painter Essentials 4 △

RATING: ★★★★★ **PRICE:** \$100 **COMPANY:** Corel

URL: www.corel.com

Geared toward arts and crafts enthusiasts, scrapbookers, and digital photography hobbyists, Painter Essentials 4 is a remarkably friendly home art studio that makes discovering the world of paint and brushes enjoyable. If you're the least bit creative, Painter Essentials 4 could be the most fun you've had in front of a computer in years (though you'll want to spring for a graphics tablet). It's affordable, and the new interface makes it a joy to use (macworld.com/3171).

HARDWARE

Bamboo Fun

RATING: ★★★★★ **PRICE:** small, \$99; medium,

\$199 **COMPANY:** Wacom Technology

URL: www.wacom.com

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for years. Wacom's new Bamboo line brings pen and tablet computing to the casual home or office user. Bamboo Fun is available in four colors (black, white, silver, or blue) and two sizes (small, with an active area of roughly 6 by 4 inches; or medium, with an active area of roughly 8 by 6 inches). Both sizes include a cordless pen with eraser and a cordless



mouse for use on the tablet. The package also comes with a collection of popular design software. It may take a while to get accustomed to a tablet, but once you do, odds are you won't go back to a traditional mouse (macworld.com/3169).

Biscuit for 3G iPod Nano

RATING: **PRICE:** colors, \$20; black, \$22

COMPANY: SwitchEasy **URL:** www.switcheasy.com

The Biscuit is one of the rare iPod cases that's functional, protective, attractive,



and inexpensive. It fully encases your 3G iPod nano in smooth, glossy Lexan polycarbonate plastic. A matching cover for the dock connector port protects the player's bottom, and a static-adhesive cover shields the nano's Click Wheel. Included are a clear, static-adhesive guard for your nano's backside that protects the shiny metal from being scratched by the case itself; a Universal Dock adapter; a 3-inch adapter that plugs into the nano's headphone jack and lets you use headphones with large plugs; a thick, sturdy lanyard; and a microfiber cloth for cleaning your nano. One drawback is that some accessories that connect directly to the dock-connector port don't fit well since the

nano's dock-connector port isn't completely flush with the bottom of the case (macworld.com/3168).

iGroove SXT

RATING: **PRICE:** \$149 **COMPANY:** Klipsch

URL: www.klipsch.com

The iGroove SXT offers full, rich sound in a package that's less than half the size of—and \$100 cheaper than—Klipsch's original iGroove. Although it doesn't have the best treble detail of the compact desktop speaker systems we've reviewed, its low-end performance is better than expected, and it pumps out surprisingly powerful sound for its size. The Universal Dock accommodates all dockable iPods, including the iPhone and the iPod touch. A video-out jack lets you connect the SXT to your TV if you're using a



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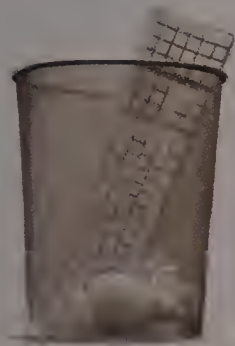
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video-capable iPod, and you can even mount it on a wall (macworld.com/3167).

X500n

RATING:  **PRICE:** \$499 **COMPANY:** Lexmark **URL:** www.lexmark.com

Even at the low price of \$499, the X500n color laser multifunction printer delivers solid results with its ability to print, scan, and copy. Its scanner utility functions smoothly and works over a network. A large factor in the X500n's

affordability is its lack of the fax machine that's increasingly common on laser MFPs. Although it scans slowly and its copies lack some detail, this MFP is fast, easy to use, and a strong overall performer (macworld.com/3112).

Image Editors

Acorn 1.0


RATING:  **PRICE:**

\$40 **COMPANY:** Flying Meat **URL:** www.flyingmeat.com

Acorn 1.0.2 is a wonderfully simple image editor designed for people who just want to crop a photo, add some text, and perhaps do some minor editing—without the palettes, steep learning curve, and off-putting price tag that accompany many full-featured image editors. Acorn offers basic drawing, text, and selection tools, and enough filters to keep the average user satisfied (macworld.com/3164).



Picnik 1.0

RATING: 

PRICE: Free; \$25

per year (Premi-

um version) **COMPANY:** Bitnik **URL:**

www.picnik.com

As people increasingly upload photos to the Web or e-mail them directly from their cameras and cell phones, Flash-based online photo editing software like Picnik provides a needed service: it facilitates basic, routine editing and offers many extras. It's fun to use, it's easy to learn, there's plenty of help, and you don't have to download or install anything (macworld.com/3166).



Pixelmator 1.0

RATING:  **PRICE:** \$59

COMPANY: Pixelmator

Team **URL:** www.pixelmator.com

Pixelmator 1.0.1 is a fantastic layers-based image editor that uses Apple's Core Image technology to work much of its magic. With over 20 selection tools, 15 color-correction tools, 50 filters, and support for more than 100 file formats (including EPS, JPEG, PDF, PSD, RAW, and TIFF), Pixelmator is poised to fill the giant void between Photoshop and quick-edit newcomers such as Acorn (macworld.com/3165).



Maximize Your Mac

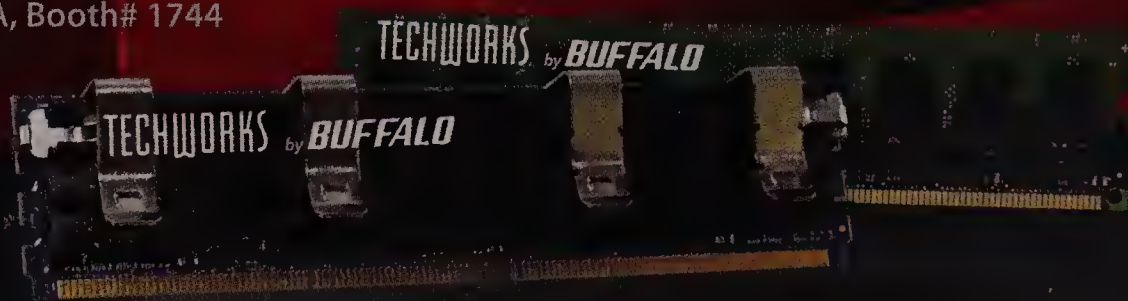
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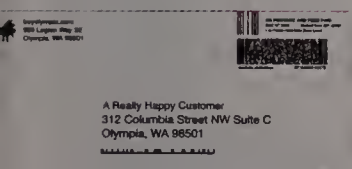


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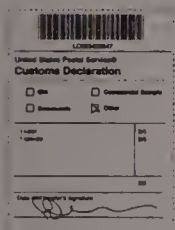
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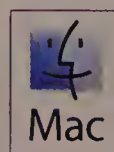


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Top Products

Your guide to the best hardware we've tested. See more at macworld.com/reviews.

PRINTERS

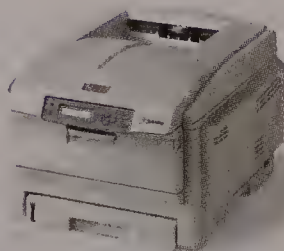
LASER PRINTER C6100dn

RATING: 

PRICE: \$759

COMPANY: Oki Data

URL: www.okidata.com



The C6100dn, from Oki Data, produces great-looking prints and includes built-in duplexing. It also offers easy network connectivity and quick printing speeds (macworld.com/1670).

INK-JET PHOTO PRINTER

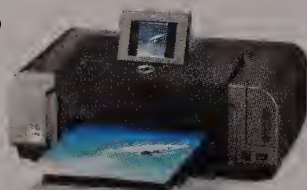
Pixma iP6700D

RATING: 

PRICE: \$195

COMPANY: Canon

URL: www.canon.com



The Canon Pixma iP6700D prints excellent-quality photos comparable to those developed in a lab. Its ease of use ensures that veteran photographers won't miss the long days they spent in a darkroom (macworld.com/2700).

COMPACT PHOTO PRINTER

PictureMate Zoom PM 290

RATING:  **PRICE:** \$200

COMPANY: Epson

URL: www.epson.com



Affordable, problem-free, and fun to use, the PictureMate Zoom is the best and fastest portable photo printer you can currently buy (macworld.com/3102).

MULTIFUNCTION INK-JET

Photosmart C7180

RATING: 

PRICE: \$260

COMPANY: Hewlett-Packard

URL: www.hp.com



The HP Photosmart C7180's features, connection options, and solid print and

scan quality make it an excellent ink-jet MFP (macworld.com/2475).

MULTIFUNCTION LASER

AcuLaser CX11NF

RATING:  **PRICE:** \$600

COMPANY: Epson

URL: www.epson.com

This device has it all: it's a color laser printer, a sheet-fed scanner,



a copier with networking capabilities, and a fax machine (macworld.com/1669).

FLATBED SCANNER

Perfection V700 Photo

RATING: 

PRICE: \$506






























COMPANY: Epson

URL: www.epson.com



The Epson Perfection V700 Photo is an excellent midrange scanner for people who need to scan both reflective media and transparencies, espe-

MACS

PRODUCT	PROCESSOR	RATING	PRICE ^a	DISPLAY	SPEEDMARK ⁵ SCORE ^b	FIND CODE ^c
DESKTOP						
iMac 	Intel Core 2 Duo/2GHz		\$1,175	20 inches		210 3029
	Intel Core 2 Duo/2.4GHz		\$1,490	20 inches		245 3028
	Intel Core 2 Duo/2.4GHz		\$1,780	24 inches		245 3027
Mac mini 	Intel Core 2 Duo/1.83GHz		\$575	not included		159 3030
	Intel Core 2 Duo/2GHz		\$770	not included		172 3031
Mac Pro 	Intel Xeon/two dual-core 2.66GHz		\$2,291	not included		260 2489
PORTABLE						
MacBook 	Intel Core 2 Duo/2GHz		\$1,099	13 inches		172 3214
	Intel Core 2 Duo/2.2GHz		\$1,231	13 inches		185 3215
	Intel Core 2 Duo/2.2GHz (black)		\$1,499	13 inches		186 3216
MacBook Pro 	Intel Core 2 Duo/2.2GHz		\$1,800	15 inches		185 2932
	Intel Core 2 Duo/2.4GHz		\$2,200	15 inches		199 2933
	Intel Core 2 Duo/2.4GHz		\$2,330	17 inches		204 2934

^a From a PriceGrabber survey of retailers as of November 12, 2007. ^b Speedmark 5 is Macworld Lab's standard test tool for benchmarking systems running Mac OS X 10.5 (Leopard). For information on Speedmark testing, go to www.macworld.com/speedmark. ^c Typing in find codes after macworld.com/ directs you to a product's review or overview. For example, macworld.com/2489 contains an overview of the 2.66GHz Mac Pro.

Top Products are those we've recently reviewed in a comparison of like products. As new products become available, we'll update this list. For longer reviews of these products and for other product recommendations, go to macworld.com/reviews. All prices are the best current prices taken from a PriceGrabber survey of retailers as of November 12, 2007.

A man in a dark suit, white shirt, and red tie stands against a red background. He is holding a small, silver, rectangular device in his left hand. The device has a textured surface and a small screen or indicator. In the top right corner, there is a circular, textured object that looks like a globe or a decorative light fixture.

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cially at high resolutions (macworld.com/1519).

DIGITAL CAMERAS

DIGITAL SLR

D4o

RATING: ★★★★★¹

PRICE: \$475

COMPANY: Nikon

URL: www.nikonusa.com



The Nikon D4o is a great value. This 6.1-megapixel camera comes with every feature you'd desire in a DSLR, such as adjustable ISO, Raw mode, and a variety of image-processing features (macworld.com/2498).

COMPACT DIGITAL CAMERA

NV11

RATING: ★★★★★¹

PRICE: \$270

COMPANY: Samsung

URL: www.samsung.com



An excellent all-around camera, the Samsung NV11 is equally accommodating of beginners and advanced shutter-bugs (macworld.com/2984).

MINIDV CAMCORDER

PV-GS320

RATING: ★★★★★

PRICE: \$372

COMPANY: Panasonic

URL: www.panasonic.com



Compared with other 3-CCD MiniDV camcorders, the Panasonic PV-GS320 is a bargain. And it's a good choice for people who want a camcorder that shoots high-quality video and still images for half the cost of a high definition device (macworld.com/2701).

LCD MONITORS

LARGE DISPLAY

LP2465

RATING: ★★★★★

PRICE: \$553

COMPANY: Hewlett-Packard

URL: www.hp.com



The LP2465 is an affordable and flexible 24-inch desktop LCD with a 16:10 wide-screen aspect ratio that immediately calls to mind the cinema (macworld.com/2508).

MEDIUM DISPLAY

MultiSync

2190UXi

RATING: ★★★★★¹

PRICE: \$997

COMPANY: NEC

URL: www.necdisplay.com



The 21-inch NEC MultiSync 2190UXi does not come cheap, but it offers vivid and accurate colors, as well as a wide viewing angle (macworld.com/1445).

DUAL-LAYER DVD BURNER

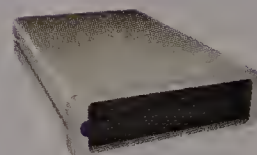
d2 DVD+/-RW with LightScribe

RATING: ★★★★★¹

PRICE: \$170

COMPANY: LaCie

URL: www.lacie.com



Speedy and versatile, the LaCie d2 external rewritable drive has the added bonus of being able to burn LightScribe images—a cool disc-labeling technology (macworld.com/2263).

FIREWIRE HARD DRIVES

DESKTOP DRIVE

G-Drive Q 500GB

RATING: ★★★★★

PRICE: \$248

COMPANY: G-Technology

URL: www.g-technology.com



The G-Drive Q SATA hard drive has nearly every type of connection you could want. It operates without a fan, so it's very quiet—you hear only the occasional spin of the drive (macworld.com/1622).

PORTABLE DRIVE

Rocbit 2B

RATING: ★★★★★

PRICE: \$187

COMPANY: Roc-

secure **URL:** www.rocsecure.com



The Rocbit 2B is a fast and pleasantly quiet portable hard drive featuring real-time encryption. It's well worth its cost if security is a concern (macworld.com/1443).

iPODS

PRODUCT	CAPACITY	RATING	PRICE ^a	DISPLAY	BATTERY LIFE	MEDIA SUPPORTED	FIND CODE ^b
iPod classic 	80GB	★★★★	\$240	2.5-inch color	30 hours of music playback; 5 hours of video playback	Music, photos, album art, video, games	3090
iPod classic 	160GB	★★★★	\$340	2.5-inch color	40 hours of music playback; 7 hours of video playback	Music, photos, album art, video, games	3091
iPod touch 	8GB	★★★★ ¹	\$299	3.5-inch color	22 hours of music playback; 5 hours of video playback	Music, photos, album art, video	3092
iPod touch 	16GB	★★★★ ¹	\$395	3.5-inch color	22 hours of music playback; 5 hours of video playback	Music, photos, album art, video	3093
iPod nano 	4GB	★★★★ ¹	\$144	2-inch color	24 hours of music playback; 5 hours of video playback	Music, photos, album art, video, games	3094
iPod nano 	8GB	★★★★ ¹	\$195	2-inch color	24 hours of music playback; 5 hours of video playback	Music, photos, album art, video, games	3095
iPod shuffle 	1GB	★★★★	\$76	none	12 hours of music playback	Music	2238

^a From a PriceGrabber survey of retailers as of November 12, 2007. ^b Typing in find codes after macworld.com/ directs you to a product's review or overview. For example, macworld.com/3092 contains an overview of the 8GB iPod touch.

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» Up to 1,400,000 images!*



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» Up to 4,500,000 images*

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Take an in-depth look at what's
new in OS X 10.5, and learn
how to upgrade the right way

LEOPARD LANDS



The fifth major update to Mac OS X, Leopard contains so many features—more than 300 by Apple's count—that it's difficult to boil down the \$129 operating system release to a few easy bullet points. Leopard is, all at once, a major change to the Mac interface, a sweeping update to numerous included productivity programs, a serious attempt to improve Mac OS security, and a vast collection of tweaks and fixes.

With new features such as **Time Machine** (page 58) and **Spaces** (page 62), and updated versions of **Safari** (page 63), the **Finder** (page 60), **Spotlight** (page 68), **Mail** (page 72), and more, there's no single feature in Leopard that will compel Mac users to upgrade immediately. Rather, it's the sheer number of new features that's likely to persuade most active Mac users to upgrade, especially since Leopard closes the longest gap between upgrades—two and a half years—since OS X was introduced. Sure, some items on Apple's list of 300 features might seem inconsequential, but if even a handful of them hit you where you live, that will be more than enough motivation for you to make the move. Despite a few interface missteps, particularly when it comes to the menu bar and the Dock, Leopard is an upgrade that roars.

Let us fill you in on some of the important changes Apple has packed into this release, as well as show you how to upgrade to Leopard.



PROS: Easy backup tools; major improvements in included applications; addresses numerous shortcomings of previous OS versions; improved security and networking functions.

CONS: Stacks and Dock features seem poorly thought out; illegible menu items with some desktop backgrounds; some bugs in Spaces window behavior.

PRICE: \$129

COMPANY: Apple

MORE INFO: macworld.com/3228



INSTALLING LEOPARD

Most of us face the prospect of upgrading an operating system with a mixture of excitement and dread. True, a new OS brings cool new ways to work. But when you install a major version of OS X, you're also essentially gutting your Mac and replacing its virtual insides. Here's a guide to making the upgrade process as trouble-free as possible.

What You Need

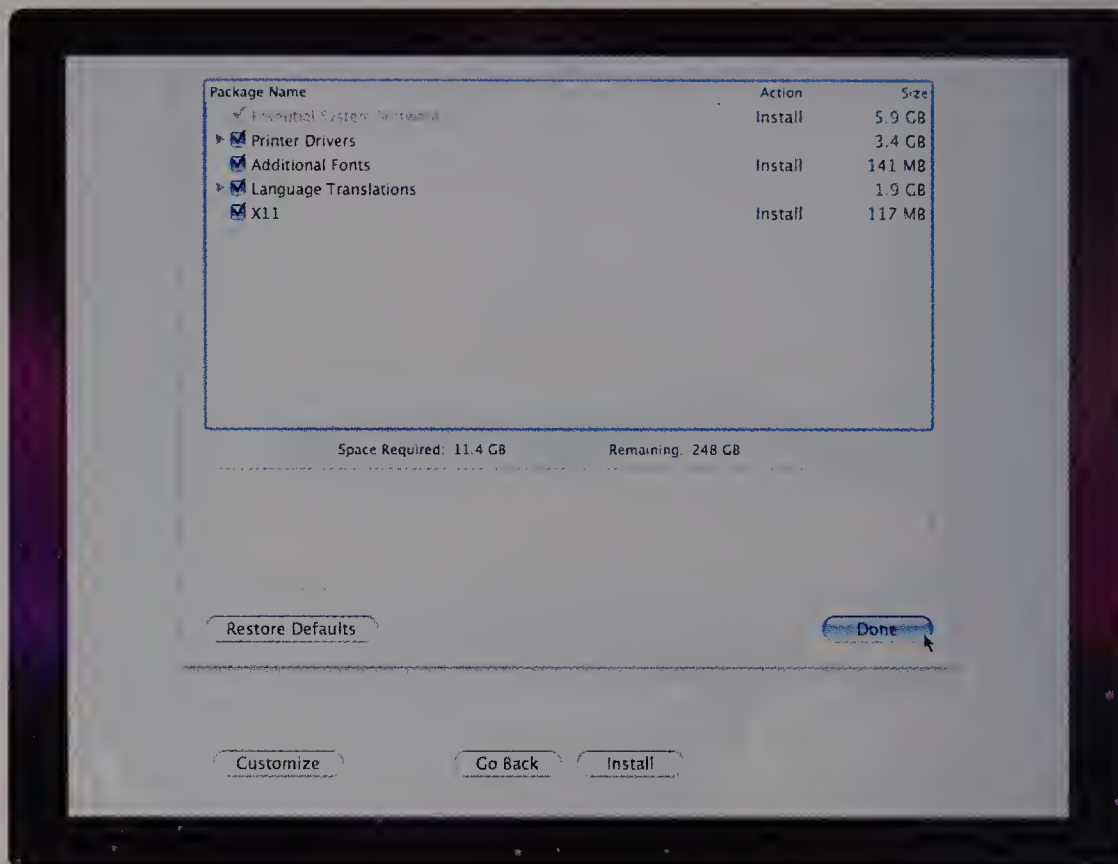
The two most important things you need before you start are a compatible Mac and a complete backup of all your data. Leopard requires a Mac with an Intel or a PowerPC G4 or G5 processor (G4 processors must be at least 867MHz), a DVD drive, built-in FireWire, at least 512MB of RAM, and at least 7GB of free hard-drive space. To protect yourself from mishaps, it's a good idea to *clone* your hard drive as a bootable backup instead of just backing up data piecemeal. You can create a clone—a complete, identical copy of your Mac's hard drive—with a utility such as Shirt Pocket's \$28 SuperDuper (♦♦♦♦♦; macworld.com/2325). If anything goes wrong with the upgrade, you can restore your data and be back where you started with nothing lost but time. (For instructions, see "Easy Mac Backups" at macworld.com/2596.)

Before You Begin

Here are a few steps you should take before you start the installation process:

Double-Check Your Backup Make sure you can boot from it by actually using it to start your Mac.

Verify Compatibility with Leopard Check vendor Web sites to see whether the programs you use most are compatible with Leopard—this includes login items (in the Accounts preference pane), third-party preference panes, and third-party system add-ons. If new versions are available, download them for installation after the upgrade.



Choose Your Installation Components You can choose to save space while installing OS X by forgoing things you'll never use—such as other languages and unnecessary printer drivers. If you decide you want, say, X11 in the future, you can always install it later.

Choose Your Installation Method

To evaluate your options, see "Decoding Your Installation Options."

Run Disk Utility Verify and, if necessary, repair your hard drive using this tool. You can access it from the OS X Installer's Welcome screen—choose Utilities: Disk Utility.

The Installation Process

The actual installation procedure is straightforward, but there are opportunities to customize your installation.

Select a Destination After you select the drive you want to install Leopard on, click on Options and choose your installation method: Upgrade, Archive And Install, or Erase And Install.

Pick What Not to Install Click on Customize, and you can opt not to install several items in order to save hard-drive space. Here are some things you can likely skip:

- **Printer Drivers:** You can deselect all but the brand of your printer (or printers) to save several gigabytes of space. However, if you're installing Leopard on a laptop, having all these drivers is useful when you need to use another printer on the road.

- **Additional Fonts:** If you don't need the listed fonts, deselect this item.

- **Language Translations:** If you don't need to run OS X in languages other than English, deselect this item. Alternatively, expand the item and deselect particular languages.

- **X11:** This option lets you use software that requires the X11 Unix windowing system. Most people can skip this one.

After you've made your choices, click on Install on the Install Summary screen, and the installation will begin. The process can take a while. When the installation is finished and your Mac

restarts in Leopard, you'll see either the full-length, full-screen Setup Assistant (if you did an Erase And Install) or a shorter registration version.

After You're Done

If you performed an Archive And Install and opted to preserve user accounts and network settings, you should be up and running pretty much where you left off. If you chose not to preserve user accounts and network settings, or if you selected the Erase And Install option, the Setup Assistant will give you the opportunity to transfer files from another Mac, another drive on the current Mac, or a backup volume. You can transfer user accounts, network and other settings, programs, and other nonsystem data. Though this process is slow, it works well.

In either case, you'll want to check your favorite programs to make sure they're working properly. You may need to enter registration or serial numbers for some. Other programs may require reinstallation (particularly those that install files in the /Library or /System/Library folders). Also keep an eye out for misbehaving programs; you may not be able to use some programs until the developers release compatible updates.

Move Important Files To finish up, we recommend navigating to the Previous Systems folder and browsing through its subfolders to make sure all your files were moved properly. For example, if you use the Archive And Install option to preserve user accounts, the files inside the Shared user folder don't get moved. You'll likely want to copy them to the new /Users/Shared folder. (If you use the Setup Assistant to transfer files, the Shared folder's contents do get transferred.)

Also check inside the Library folder in Previous Systems, paying special attention to the contents of Contextual Menu Items and QuickTime. If the Library folder contains files that the programs you use require, or third-party system add-ons that you want to continue using, you may want to transfer them manually to the same location in the current /Library folder. (It may

DECODING YOUR INSTALLATION OPTIONS

It's easy to overlook the Options item in Leopard's installer. Clicking on this little button reveals several significant choices about how OS X gets installed on your Mac. Here's what each option does:

Upgrade Mac OS X

This option keeps your older version of OS X but installs new versions of any files that have changed in Leopard. We recommend this option only for brand-new Macs you're upgrading from Tiger to Leopard right out of the box.

Archive And Install We recommend Archive And Install (or Erase And Install, combined with restoring your data from a full backup using Setup Assistant) for most users. This method installs a complete version of Leopard, using none of your older OS X files. However, it keeps all your older system files on your hard drive—just in case you ever need one of them. We advise choosing the Preserve Users And Network Settings option, because this brings your existing user accounts and all user data into Leopard. (Note that the Archive And Install option requires much more hard-drive space than the Upgrade Mac OS X option. As described elsewhere in this section, it may also require a bit of manual file transferring.)

Erase And Install This method erases your entire hard drive—deleting all your data—and installs Leopard. (It should go without saying that you *must* have a complete backup of

Upgrade Mac OS X

Upgrades Mac OS X from an earlier version. Upgrading is not intended to remove previously installed applications or files.

Archive and Install

Moves existing system files to a folder named Previous System, and then installs a new copy of Mac OS X. You cannot start up your computer using the Previous System folder.

Preserve Users and Network Settings

Imports existing user accounts, their home folders, and your network settings into the new system. You will skip Setup Assistant when installation is complete.

Erase and Install

Completely erases the destination volume and then installs a new copy of Mac OS X.

Format disk as: Mac OS Extended (Journaled)

Cancel

OK

your data.) This option is useful if your current OS X installation has been having problems, since it eliminates any disk or file corruption. Choose the Format Disk As Mac OS Extended (Journaled) option. But unless you really want to start from scratch, you'll need to either re-create your user accounts in Leopard and restore your data from your backup after installation, or use OS X's Setup Assistant to transfer the accounts and data from another computer or from a full backup.

Install Mac OS X You'll see this option—*instead* of Upgrade Mac OS X—only if you choose a volume that doesn't already have an upgradable version of OS X installed. (If you got your copy of Leopard through the Mac OS X Up-To-Date program—for people who purchased a Mac that shipped with Tiger after Leopard was released—your disc will install *only* onto a drive that already has Tiger installed. You'll get the same installation options except for this one.)

be easier to simply reinstall this software, however, to ensure that you have all the necessary support files.)

Get Back to Work

With any luck, this entire process should take just a few hours, which

isn't bad for something you need to do only once every couple of years. And with the help of these tips and suggestions, you should be back up and running, and enjoying Leopard's new features, with minimal growing pains.

NEW AND IMPROVED FEATURES

Apple says that Leopard contains more than 300 new features. Although there isn't enough room here to cover them all (visit macworld.com/1658 for our up-to-the-minute Leopard coverage), we can delve into some of the most significant ones.



Time Machine Interface Backups appear chronologically in 3-D space.

Time Machine

➔ OS X 10.5's new built-in backup program is designed to work with internal and external hard drives. Time Machine automatically creates time-based snapshots of your Mac, letting you instantly retrieve files, folders, and applications that you may have deleted—or even just older versions of documents that you've updated.

Getting Started Using a unique 3-D interface, Time Machine attempts to turn the complex and sometimes confusing processes of backing up and restoring into simple, visual operations. Backing up is easy: attach a drive with enough capacity, enable it for use with Time Machine,

and then wait for the initial backup to complete. Once that's done, Time Machine will automatically work in the background, creating backups of files as you modify your system.



Finding Files When you need to retrieve something, you launch Time Machine and simply “flip back” through time to find the files you want to restore. Some people will

love Time Machine's interface; some will hate it—nonetheless, it does make the relationship between your files and folders and time quite obvious, and this helps quite a bit when you're trying to restore files from a backup.

How Well It Works

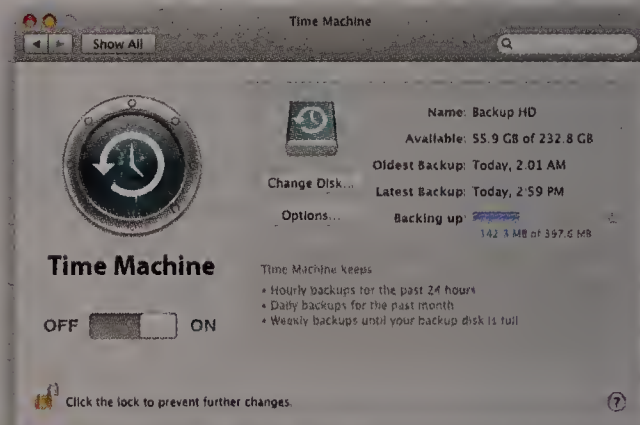
In our testing, Time Machine worked quite well. Initial backups took some time, of course, but after that, we didn't notice much slowdown during typical use of our Macs.

As a user, you don't have a lot of control over exactly how Time Machine operates. You can disable it and specify certain files and folders that you don't want it to back up, but that's about all. The more available space you have, the more versions of things you can keep.

Who It's Good For

Time Machine is perfect for nearly everyone who has enough drive space to make the most of it. It's not, however, a professional versioning solution. As your Time Machine disk fills up, older versions of files are deleted to make room for new ones. If you need permanent versioning control, you'll want to find another solution.

Time Machine doesn't work instantaneously—if you create a file and then delete it a few seconds later, Time Machine won't have time to create a backup copy of it. But that's not really what Time Machine is designed for. Think of it as a safeguard for all those priceless digital images, documents, and media files that you store on your machine.



Setup In Time Machine's preference pane, you set which drive to use, as well as which files and folders to exclude from backup.

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The Finder and Dock



Though you may not think of the Finder this way, it's the most frequently used program in OS X. It runs from the moment you log in until the time you log out, handling all your file-management tasks. It's also the face of the OS X interface when you're not using an application.

What's New

Since you spend most of your time in the Finder, you'll need to familiarize yourself with some of its big changes.

New Appearance The first thing most Leopard users will notice is the Finder's new look. Gone are the bright, colorful folder icons of OS X 10.4 (and every Mac OS release since the days of System 7). In their place, you'll find a look of uniform blue and gray, with much subtler indicators of the folders' contents. Further, the menu bar and menus are translucent, and the Dock is no longer a dock—it's more of a shelf, complete with reflections of windows that get close to the shelf, and pronounced drop shadows for Dock icons. Some people will love the look; others will hate it. (If you hate it, try moving it to the side of your screen—it turns into a non-3-D alternative.) But once you get beyond appearance, you'll find other, more substantive changes.

Quick Look Although Quick Look is actually something of a systemwide feature, you'll end up using it often in the Finder. It lets

you see inside a file without going to the trouble of opening it in its related application. Instead, you can highlight a file in the Finder and press the spacebar. A new window will open and display the file's contents (see "Quick Look"). This window is scrollable (for multiple-page documents), resizable, and movable, and it has two buttons at the bottom; pressing one will add a displayed image to iPhoto, and pressing the other will toggle to Quick

Look's full-screen mode. You can use Quick Look with nearly any kind of file. Text files, movies, Adobe Photoshop images, PDFs, Microsoft Office 2004 documents, image files, and even MP3s all show (and in the case of movies and audio files, play) in the Quick Look window.

If you use a third-party program with a proprietary file format, however, you may not be able to use Quick Look

on its files, at least not until its developer updates it to provide a Quick Look preview.

After spending just a few minutes using Quick Look, you'll never want to go back to using preview icons (or clicking and hoping) to find a file.

Cover Flow The Finder now sports a Cover Flow view, which looks just like it does in iTunes. Much like Quick Look, Cover Flow gives you a preview of your files without opening them. It can page through PDFs and text files, and it can

play movie files (but not audio files). It's a great way to browse for an image or a movie in a crowded folder.

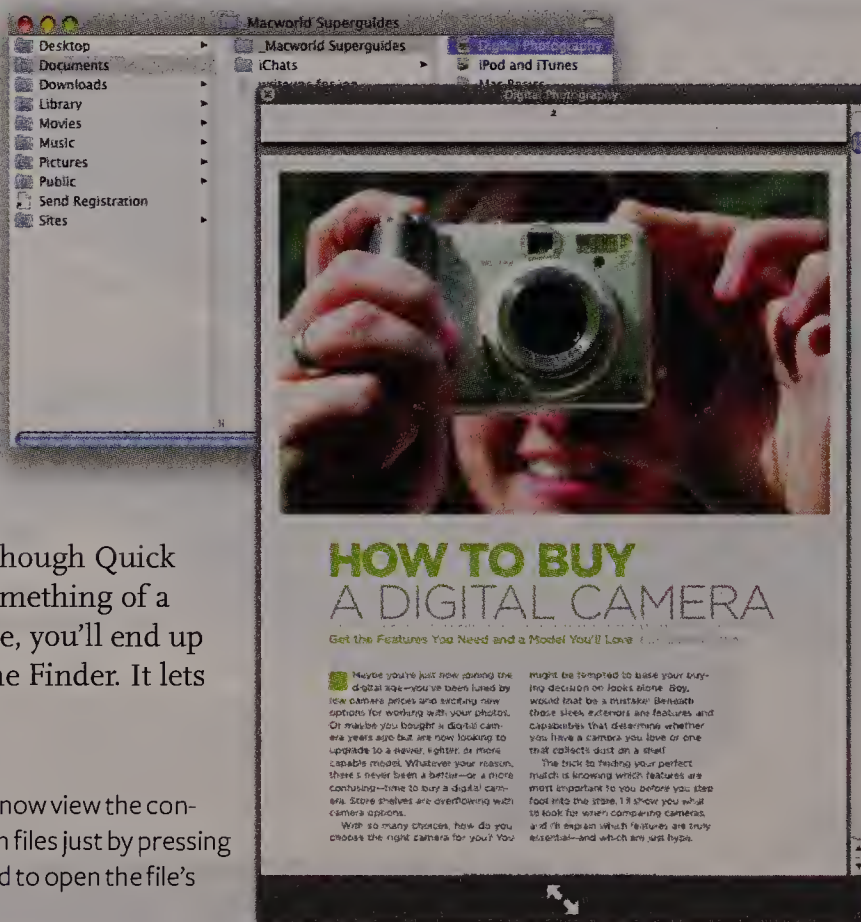
Stacks Leopard gives you a new way of looking at folders stored on the end of the Dock. In previous versions of OS X, clicking on a folder there

opened a navigable pop-up menu. In OS X 10.5, you'll get what's known as a *stack*—a visual representation of the folder's contents. You can choose to see the stack presented as a curving column of icons or as a pop-up window full of icons (if you place the Dock on the side, you only get the pop-up option).

If you have folders of images in your stacks, this is a useful feature. But if you've made extensive use of the Dock's navigable pop-up folders in OS X 10.4, stacks will likely disappoint you, as they're somewhat less powerful (you can't, for instance, drill down into subfolders in stacks).

Dock Pop-up Folders Leopard's Dock has inherited a useful feature from the Finder: spring-loaded folders. Now when you drag an item over a folder in the Dock, the folder will open momentarily in the Finder, allowing you to drop the item into a subfolder—or to dig down even further into sub-subfolders until you find the desired destination. Once you've dropped the file, the folder (as well as all the subfolders) will close and return to its resting place in the Dock.

Searches in the Sidebar A new Searches section in the Finder's sidebar comes populated with a number of handy saved searches—to help you





Finder Interface Leopard's Finder adds a Cover Flow view, a redesigned Dock, larger icons, the ability to see the path to your files, and much more.

quickly find items modified today, yesterday, or in the past week, and to show all movies, images, or documents.

Even more useful than the canned searches is the ability to add your own searches. After you create a search in the Finder, click on the Save button, and you'll see a new Add To Sidebar option that does just what you'd expect it to.

Striped List View The Finder's List view now sports stripes—rows in List view windows now alternate between white and light-blue backgrounds, making it much simpler to read the items in wide windows.

Changes in View Options In both the Icon and the Column views, you'll discover changes in the View: Show View Options dialog box. In Icon view, the big news is the return of customizable grid spacing. That's right—you're no longer stuck with the OS X default (really wide) setting for grid spacing.

For Column view, a very handy new Arrange By pop-up menu lets you sort column windows by name, date modified, date created, size, kind, or label. Unfortunately, these settings are global, so you can't have one Column view

window sorted by name and another sorted by date modified.

Speaking of global settings, the List and Icon view windows have changed in that regard. Instead of OS X 10.4's two options (This Window Only or All Windows), Leopard includes a new Use As Defaults button. Unless you click on that button, changes apply only to the current window.

Finally, the Snap To Grid setting for Icon view windows has found a new home. At first glance, you might think it's gone, as the stand-alone check box is missing. Instead, the setting is hidden near the top of the Arrange By pop-up menu.

New Finder Preferences Hidden in the Advanced section of the Finder's preferences is the ability to disable warnings about changing a file's extension. If you'd rather not be warned every time you want to change .html to .htm, just make sure the box next to Show Warning Before Changing An Extension doesn't contain a check mark. The other new check box here will force the Trash to always empty securely.

Assorted Other Changes In OS X 10.5, the Finder's file-compression

PREVIEW 4

With the newest version of Preview, you can now reorganize PDF pages and merge multiple PDF documents. Preview also features improved annotation tools for commenting on documents. Of the program's imaging tools, one of the most useful is the Adjust Size option, which lets you adjust an image's resolution, set dimensions in inches or pixels, and resample the image to create a larger version—a feature we'd love to see iPhoto take advantage of. The Extract Shape tools lets you paint a border around the edges of an object to select everything within, while the Instant Alpha tool selects masking areas based on tones; it's similar to Photoshop's Magic Wand tool.



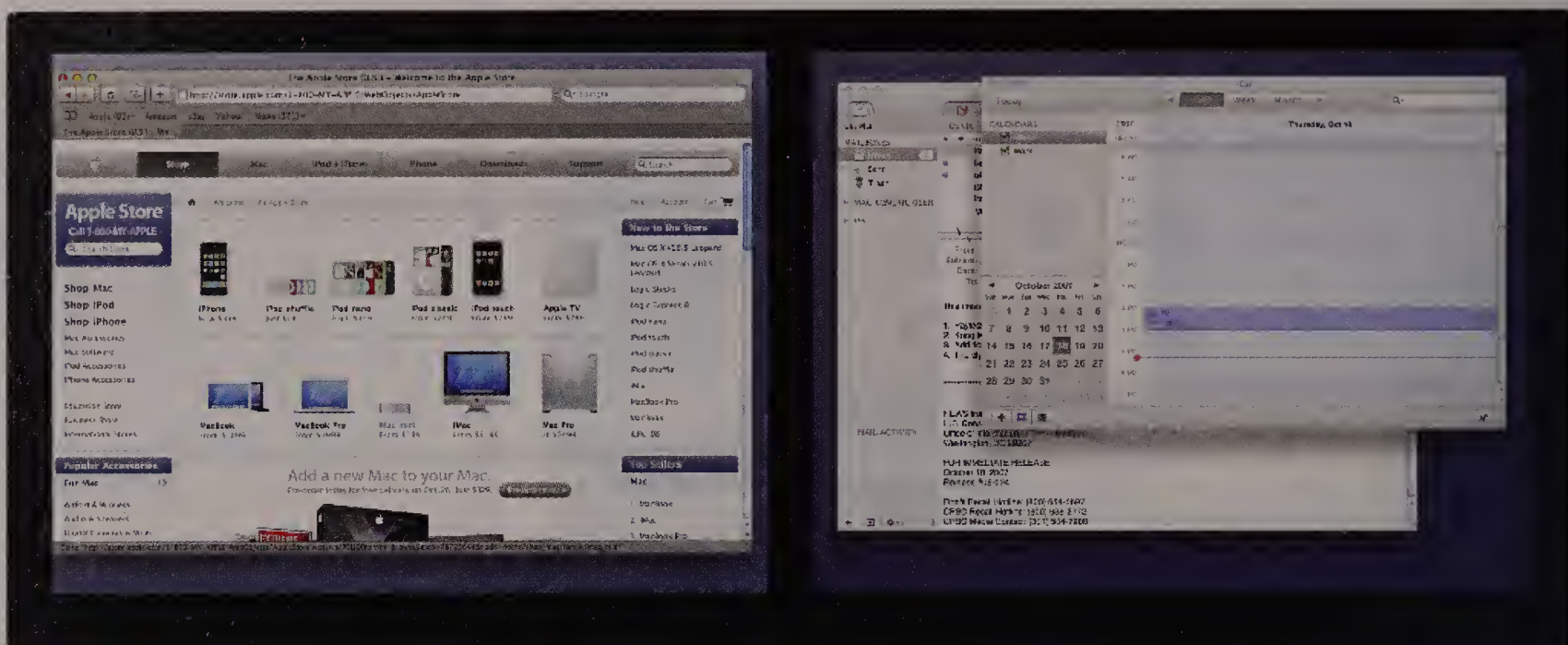
menu item has changed from Create Archive From "file name" to Compress "file name." In the Trash window, there's an Empty button for deleting the Trash's contents. The entries found at the bottom of OS X 10.4's contextual menu—Automator, Enable Folder Actions, and so on—have been relegated to their own More submenu. There's also a new option for sending a selected file to a Bluetooth device; third-party contextual-menu extensions appear in this submenu as well.

How Well It Works

The rewritten Finder is fast, and it handles large folders much more easily than its predecessors. Quick Look, Cover Flow, and the other new features are all welcome additions, and the Finder is now a more functional place to spend your time. Whether that time is more enjoyable, though, may depend on whether you like the new look that comes with the new features.

Who It's Good For

Some people may not care for the new look at all, and they may seek help from third parties to alter it. But regardless of how you feel about the Finder's new look, there's no question that this is a much improved application.



Spaces

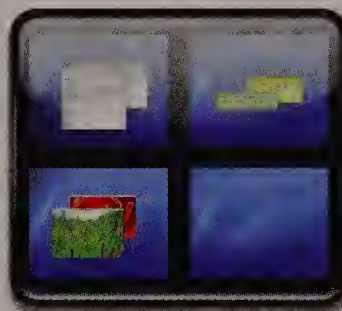
➔ One of OS X's best features is that it can run *many* programs simultaneously. But a consequence of this capability is that you can end up with lots of application windows cluttering your screen. In Leopard, Apple has addressed this issue with Spaces, which convinces your computer that it has more than one desktop, or workspace, each of which can contain its own programs and win-

Working with Spaces With virtual desktops, you can organize your tasks—for example, you can keep your Web browsing on one, and your mail and calendar tasks on another.

dows. You can then navigate between these virtual workspaces to access their discrete items.

Creating Workspaces You enable Spaces in a new Exposé & Spaces pane in System Preferences. By default, you have two workspaces, arranged horizontally; however, you can add rows or columns of workspaces—up to a maximum of four rows and four columns (for a total of 16 workspaces).

Using Windows You can switch between workspaces in a number of ways. There are also several ways to add a program window to a workspace, and you can move a window from one workspace to another or even swap the relative locations of entire workspaces.



How Well It Works

Overall, Spaces works well and is relatively easy to use, given that it's a whole new way of thinking about your on-screen work area. On the other hand, it has some limitations. Perhaps the most significant is that although you can assign particular programs to always open in particular workspaces, when you log out, Spaces doesn't automatically remember what programs and windows you had open. Spaces' behavior is also confusing at times, especially as it relates to OS X's ⌘-tab program switcher.

Who It's Good For

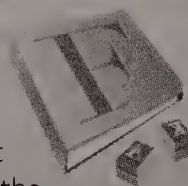
Spaces isn't for everyone. It's unlikely to appeal to people who work in just a few programs. However, the many people who use their Macs for several different tasks throughout the day, and who have wished for a better solution to window clutter than Exposé, may find the perfect answer in Spaces.

FONT BOOK 2.1

At first glance, Leopard's Font Book looks nearly identical to Tiger's, but Apple has made some significant changes to the OS X font manager that greatly enhance its usefulness. While Font Book still can't compete with the third-party font managers on the platform, many users will welcome the improvements in Leopard—which include print functionality, language specification, automatic font activation, system-font protection, and Braille support. In addition, the new WYSIWYG icons and instant Get Info previews are helpful, because now you don't have to launch Font Book to identify fonts quickly.

This upgrade matches the printing functionality of some third-party programs by letting you use the Print command to print previews of your fonts. You get a nicely formatted sample of the font you selected, in all of the available faces. The new Font Book also makes it easy to identify and disable unwanted built-in foreign language fonts so they don't show up in your font menus.

Potentially the most useful new feature of Font Book is automatic font activation, which can enable fonts in a particular document on-the-fly. In our tests, however, this feature was glitchy. It worked as expected with some fonts and some documents, but mysteriously failed with others.





Safari 3



Leopard ships with the Safari 3 Web browser, which has been available as a public beta since June 2007. Safari 3 is an evolutionary upgrade to Safari 2, but it does make your browsing life easier.

What's New

There's really only one major difference between Safari 3 in OS X 10.4 and Safari 3 in OS X 10.5: the Open This Page In Dashboard toolbar button.

Create Web Clips You can now use Safari to turn a portion of any Web page into a Dashboard widget (also known as a Web clip). The process is quite simple: click on Safari's new Open This Page In Dashboard toolbar button, and the page will dim, except for a white rectangle. Move your mouse until the rectangle is over the area you'd like to make into a Web clip, and then click. You'll see a series of adjustment circles appear on the rectangle; drag them to adjust the selection area, and click on the Add button when you're satisfied.

Dashboard will open, displaying your newly created widget. You can then click on the widget's info (i) button to choose a theme for your widget. That's all there is to it—as long as you leave the widget open. Unfortunately, there's no way to save a user-created widget, so if you close the widget (by clicking on its x button), you'll have to repeat the process.

Search Better Searching in Safari is now dynamic. After you press ⌘-F and begin to type characters, Safari highlights all the matching terms on the page, adjusting matches as you type more characters. It no longer makes you enter an entire term before searching, and it now lists all matches at once.

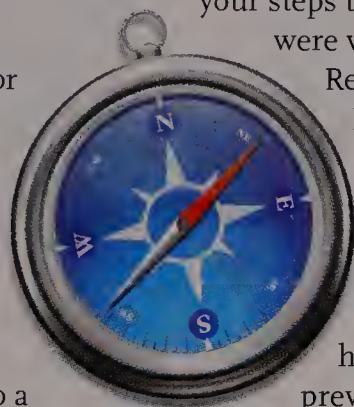
Bookmark Groups of Tabs You can now create a bookmark from a group of tabs in Safari, as you can in Firefox. For example, say you've been browsing the

Web for a couple of hours and realize it'd be great to save the six tabs you've got open as a group for future use. All you need to do is select Bookmarks: Add Bookmark For These 6 Tabs, and then name the bookmark.

Recover From Mistakes Safari's History menu now includes a Reopen Last Closed Window menu item. You'll say thank-you for this handy feature every time you get over-aggressive with ⌘-W—you'll no longer have to retrace your steps to get back to the page you were viewing. There's also a new

Reopen All Windows From Last Session item that does exactly what it promises to do; it reopens all the windows and tabs you last had open in Safari.

Prevent Mistakes Safari has a new feature designed to prevent you from doing something silly: it will warn you if you click on the red close box when you have more than one tab open. (It will also warn you if you try to close a tab or a window containing text you've entered in a Web form.)



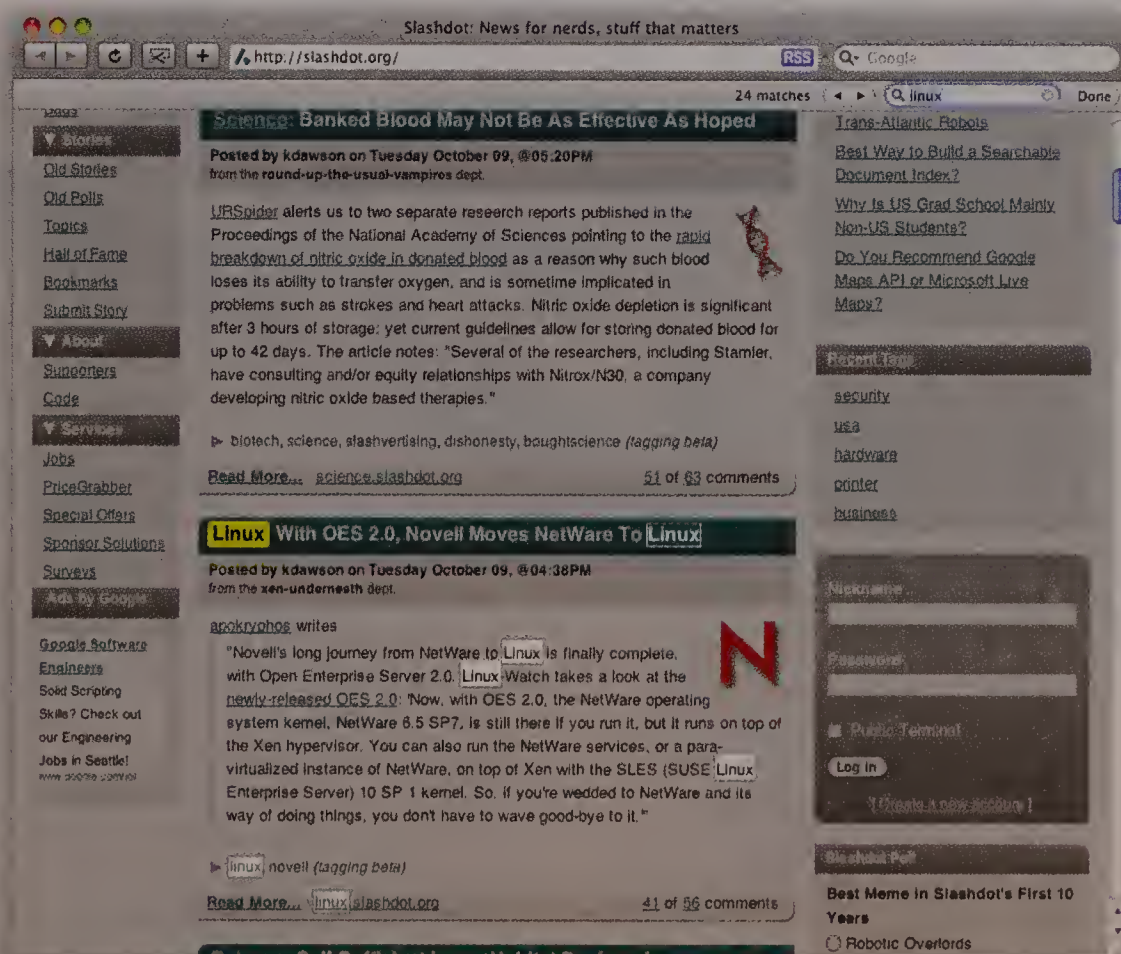
Make History Disappear Safari's preferences now include an option for automatically deleting your browsing history after a day, a week, two weeks, a month, or a year; or you can clear them manually.

How Well It Works

Safari 3 works as well as Safari 2, and its new features enhance the browsing experience. Once you've gotten used to the new search feature—which you'll notice in other OS X applications as well—there's no going back to the old style. Creating your own Web clips is also useful, but it would be a much better feature if you could permanently store your creations. And the warnings about closing multiple tabs and forms with text on them are welcome additions.

Who It's Good For

If you're a Safari 2 user, you'll enjoy Safari 3 even more. If you use Firefox or any of the myriad other OS X browsers, you'll have to decide if the ability to create your own Dashboard widgets from Web pages is a compelling reason to switch.



Finding Items in Safari An improved Find command makes it easier to search for and locate words and phrases on Web pages.



Introduced in OS X 10.4, Automator lets you create useful little programs that perform routine tasks, even if you know nothing about programming. The first version was relatively successful. And OS X 10.5's new version of Automator makes creating these little programs even easier.

What's New

Version 2 makes it likelier that you'll find the courage to launch Automator and take it for a spin.

New Look You'll notice one big change as soon you launch Automator. In OS X 10.4, you were immediately dumped into the work area, where you could start building your workflow. In Leopard, you're instead presented with a Pages- and Keynote-like sheet that displays a number of starting points.

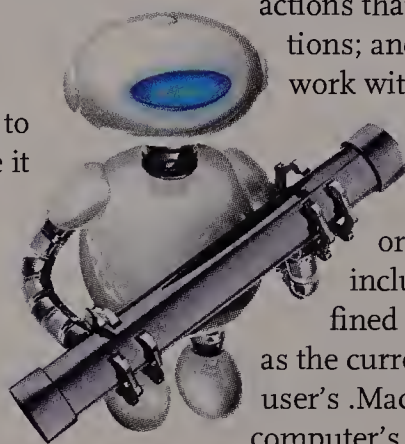
Recording In the top right corner of Automator's interface is a new Record button. Click on it, and Automator captures your keystrokes—opening System Preferences and activating a specific pane, for example, or launching an

application. While it won't allow you to do everything you might want to, it will let you work around some limitations of the built-in actions.

New Libraries and Actions Automator now includes Choose From List, which presents a pop-up list of options the user can choose from; Copy To Clipboard; Get Contents Of Clipboard; actions that hide or quit applications; and a slew of actions that work with RSS feeds.

Variables The new version supports variables, which can be text or numbers. Automator includes a number of predefined variables for things such as the current date and time, the user's .Mac account name, and the computer's uptime. There are also variables for storing text, file paths, shell scripts, and the results of AppleScripts.

Smart Groups In OS X 10.4 it was tricky to find specific actions. Automator takes care of that in three ways. First, it lists actions alphabetically within groups. Second, it sorts actions by function, not by application—so you'll find all photo-related actions in the Photos group. (You can switch to the old by-application view in the



Starting Points Automator 2 makes it easier to begin creating workflows by providing starting points for common tasks.

menu.) Third, you can create smart groups that let you easily find items meeting certain criteria.

Other New Features In the workflow area, you can now expand workflows to show the results of each step directly within the workflow itself, and the log now appears within the Automator window, instead of below it in a drop-down drawer.

How Well It Works

The ability to record keystrokes and mouse actions, the presence of variables, and the new sort-by-function view all combine to make Automator easier to use and more powerful than its predecessor.

Who It's Good For

Not everyone is going to use Automator. But for people who want to automate a repetitive action or add functionality to the Finder's contextual menu, Automator is a great tool. You don't need any programming experience, and the new Starting Points feature makes it even easier to use.

DISK UTILITY 11

Perhaps the biggest change to Disk Utility is its ability to alter the size of disk partitions without losing data. In previous versions, if you wanted to change the size or number of partitions on a certain drive, Disk Utility would first erase the entire drive and then rebuild the partitions as you requested. Now you can reallocate your disk space to new partitions or expand existing ones. We were able to create, delete, and resize multiple partitions on a drive without destroying all the data on it.

Leopard's Disk Utility also lets you resize disk images. This is a nice feature for people who use Disk Utility to make an empty disk image of, say 100MB, only to later discover that they don't need that much space.

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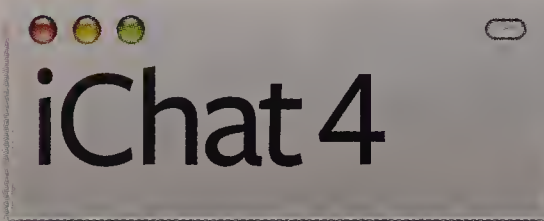
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Tabbed Chats iChat 4 can reduce screen clutter by combining multiple chats into one window—a small but very useful addition.



Apple's instant-messaging software, iChat, has made quick communication with .Mac or AIM users easy. And the latest version is a worthwhile update.

What's New

iChat 4 has some useful new features, as well as some features you might not expect in a chat program.

iChat Theater To help you share visual information with others, the new iChat provides iChat Theater. This feature lets you display an iPhoto slide show, a Keynote presentation, a QuickTime movie, or anything else that works with Leopard's new Quick Look feature as part of your video chat. It's ideal for people who want to add media to their video chats.

Video Effects Worried you look too "normal" in your video chats? iChat now offers effects out of OS X's Photo Booth application, so people can feel as though they're viewing you through a thermal camera, or can see you with a comical bulge, twirl, or mirror effect added to your image. And iChat backdrops allow you to drop in a fake background, so you appear to be floating in the clouds, standing on the moon, or traveling on a roller coaster, for example (you can use Apple's built-in backdrops or add your own images or videos).

Recording iChat has been able to save logs of your text chats for some

time, and the latest version adds the ability to record audio chats as AAC files and video chats as MPEG-4 files. These recording features could be useful for inserting audio or video into podcasts, or just keeping a record of your conversations (with permission, of course).

Multiple Logins The previous version of iChat let you add several different accounts in iChat's Accounts preference pane, but only one could be active at any given time. iChat 4 lets you have multiple active accounts at the same time, and each shows up with its own buddy list. You can even drag and drop buddies from one list to another.

Buddy List Changes New to buddy lists are the option to animate buddy pictures, a new Invisible status option that keeps you hidden from view but still lets you see your buddies and their statuses, and the ability to reorder your buddies manually instead of sorting only by first name, last name, or availability.

Tabbed Chatting iChat's Messages preference pane has two very useful additions. The first is Collect Chats Into A Single Window, which solves the problem of having multiple chat windows scattered across your desktop when you're chatting with a few people at once. While you're chatting with one person, new replies from others will show up as speech

bubbles next to their icons in the side pane—clicking on a person causes his or her bubble to vanish and brings you into an active chat with that person.

Retain Your Chats The other cool option in the Messages preference pane is Remember My Open Chats Across Launch, which saves you when you accidentally quit iChat in the middle of a conversation. When you relaunch iChat, the program will reestablish communication with the slighted parties.

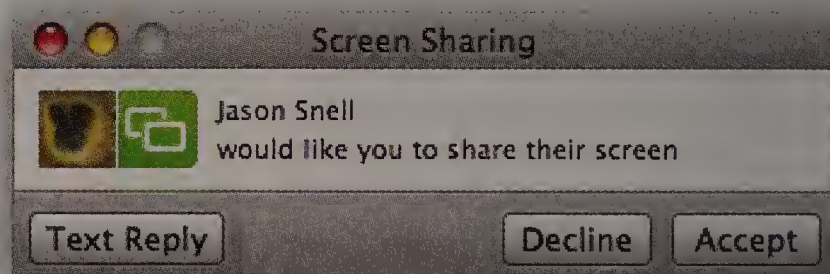
Screen Sharing Taking a page from a feature in Leopard's Finder, iChat's Buddy menu gives you the option of sharing your screen with another user or requesting permission to get shared access to his or her screen. Once you have access to a shared screen, you can control mouse movement and open folders and programs, to name a few activities (you can even drag files between computers). It's a somewhat easier way than the Finder's Screen Sharing feature to help friends and family in your Mac-using circle troubleshoot problems and the like.

How Well It Works

The new version is fast and responsive, but the Screen Sharing feature functions a little oddly—switching to sharing mode from a video chat kept only an audio chat going, and ending the session cut off a chat altogether. And iChat backdrops don't work as well as we'd like (admittedly, they're meant to be more fun than useful).

Who It's Good For

iChat 4 will appeal to people who regularly carry on multiple iChat conversations. And anyone looking to expand their use of iChat into collaboration and presentation will find helpful features in this version.



Screen Sharing You can now share your screen, or view and control—with permission—another user's screen, in a video chat.



"Got an iPod®? Use iTunes®?" Then Jax has something for you!

Jax is a plug-in for iTunes that enhances and adds new features to your iPod, iPhone®, AppleTV® and iTunes.

Video Import online videos* or your personal videos into your iPod, iPhone or AppleTV.

Lyrics Get the lyrics for songs in your iTunes library.

Music Map Research your favorite songs, bands, their band members and similar bands.

Album Art Go beyond the standard (or wrong) album art found, and easily replace with the correct album covers. You can even drag and drop your own images to create custom album covers.

Visualizers Several unique visualizers that include rotating album art, scrolling lyrics and other visually exciting features.

On-The-Go Features

Sync your iPod with iTunes to add and update the following features:

- news
- weather
- movie times
- documents
- stocks
- directions
- gas prices
- emails

*Videos supported: Youtube, Google video, MySpace video, CollegeHumor.com, EbaumsWorld.com, Veoh.com and Uber.com

*Documents supported: Office® files, PDFs, text and rtf. files



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Spotlight



OS X 10.4's marquee feature was Spotlight, a search feature that used files' indexed meta-data—creation date, body text, file type, and size, for example—to quickly ferret out matching files. While Spotlight showed promise, its performance often disappointed. In many cases, its searches were too broad, producing hundreds or even thousands of results when the term contained common words and phrases.

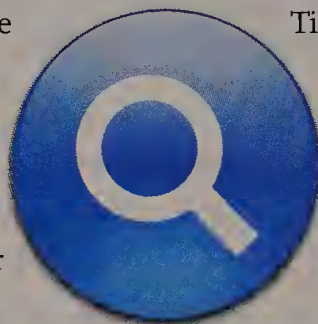
What's New

Leopard's Spotlight can conduct phrase searches that actually produce useful results, supports Leopard's Quick Look feature, and more.

Phrase Search One of the best ways to focus a Web search is by enclosing your search term in quotation marks. Leopard's Spotlight lets you conduct these same kinds of phrase searches. For instance, type **name: "file name"** (including the quotation marks), and you can use Spotlight's Search field to search for exact file names. This was not possible in Tiger.

File-name searching is even easier with the Searching window that appears when you type ⌘-F in the Finder.

Quick Look While Spotlight now narrows things down nicely, you may still get multiple results. One good way to



Phrase Searching With quotation marks and a special tag in front, you can now search for exact file names in Spotlight.

see whether you have the right file is to open a Searching window, perform your search, select the file you believe you want to open, and press the spacebar.

Search Shared Macs Spotlight can now search the contents of shared Macs, as well as your computer.

Search Through System Files In Tiger, Spotlight largely stayed out of areas reserved for the system—the System and Library folders, for example. Leopard allows Spotlight to enter and search these previously forbidden areas.

Launch Applications Spotlight is no LaunchBar, but it can act as a limited launching utility. By default, Spotlight will highlight applications as top hits.

Perform Calculations and Define Words You can now use the Spotlight search field to do math. Also, if you type a word you want to define into the search field, you'll see a Definition entry in the list of results.

Boolean Searches You can now create a Boolean search using AND, OR, and NOT operators to conduct conditional queries.

How Well It Works

Spotlight's features work as advertised. It has largely become what many of us hoped it

would be in Tiger. Better yet, unlike Tiger's Spotlight, this version is speedy.

Who It's Good For

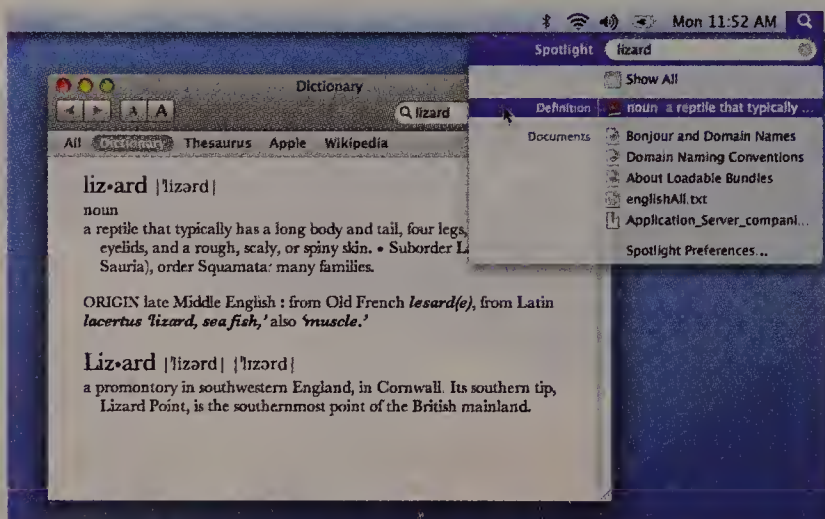
Spotlight remains a good tool for Mac users who have relied on it in the past. Now people who have turned to more-advanced (and faster) search tools may be tempted to return to Spotlight.

DICTIONARY 2

With Leopard, Apple has added a few simple—but important—features that turn the basic Dictionary into a more practical reference tool. To begin with, the menu items have been revamped and renamed. The History menu item is gone. You can, however, navigate to Dictionary pages you've previously viewed, via your toolbar's back button. In this way—and in many others—working with the new Dictionary is more akin to using a browser than perusing a dictionary.

In addition, Leopard provides more dictionary choices. A new Apple dictionary provides entries for computer-related terms, although it's extremely limited. Leopard also includes a Japanese dictionary, a Japanese-English dictionary, and a Japanese synonym dictionary.

Perhaps most interesting, though, is the ability to search the online, user-edited encyclopedia Wikipedia. You'll need to have an Internet connection to use this feature, but it's very quick and very handy.



Finding Definitions Spotlight ties in with OS X's Dictionary to provide definitions for search terms.

> take our survey

where?

Simply log onto:

www.macworld.com/surveys/joinpanel/

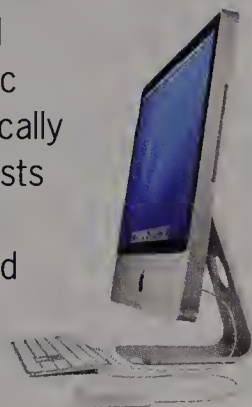
when?

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why?

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Terminal 2



Terminal is the application that gives users direct access to OS X's Unix core. As such, it's not something that everyone uses every day. However, for Unix converts and people who like to use OS X's Unix programs, it's an essential tool—and it has received a substantial upgrade in 10.5.

What's New

Terminal now has a friendlier face.

Tabs Like Safari (and almost all other Web browsers) and iChat, Terminal now sports a tabbed interface—press `⌘-T` or choose Shell: New Tab, and a new tab appears at the top of the Terminal screen.

Settings You can create various window looks and save each in the Settings section of Terminal's preference pane.

You can also independently set the opacity level of the cursor, the back-

ground color, and selected, normal, and bold text. If you were a fan of using an image for your Terminal background, though, you'll be disappointed: Leopard has dropped that feature.

Window Groups You can also create *window groups*—col-

lections of open windows and tabs. You can set a workspace as the default, so it

opens when you launch Terminal, or you can switch around using the Window: Open Window Group menu item.

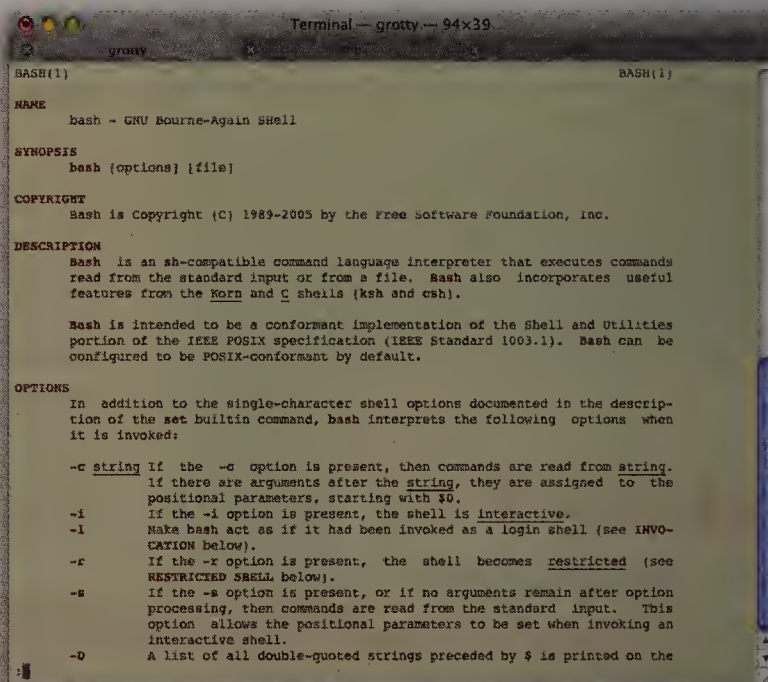
How Well It Works

OS X 10.5's Terminal works quite well, and

the addition of tabs makes managing lots of randomly placed Terminal windows a thing of the past.

Who It's Good For

In the past, Apple left some features out of Terminal. With OS X 10.5's Terminal, however, the number of omissions is much smaller, and more people will find that Terminal suits their needs just fine.

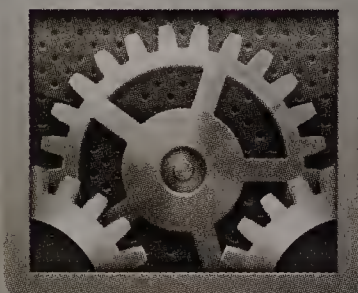


Tabs Terminal now lets you collect all your open windows into one tabbed interface.

SYSTEM PREFERENCES

Although most of the changes Apple has touted in Leopard are new OS features and improvements to programs, the System Preferences utility also boasts a number of new features and settings. Here are a few important ones.

Security The firewall settings have changed considerably since Tiger. The new approach is easier to configure: you choose between Allow All Incoming Connections (the firewall is off), Block All Incoming Connections (the firewall is on with maximum protection), or Limit Incoming Connections To Specific Services And Applications. With the last option, you can configure individual programs separately. An Advanced tab holds options for firewall logging and stealth mode



(in which your computer never responds to external network requests).

However, this simpler configuration approach also removes the advanced settings that were accessible in Tiger. For example, there's no way to open or close a specific port, to restrict network access to TCP or UDP, to configure the firewall for individual OS X services (such as File Sharing or Web Sharing), or to allow some types of connections by a particular program but not others.

Keyboard & Mouse One convenient improvement here is that the Modifier Keys tab—which lets you change the behavior of the control, option, `⌘`, and caps lock keys (handy when you're using a Windows keyboard with a Mac)—now lets you choose different settings for different keyboards. So, for example, if you use a Windows keyboard with your MacBook

Pro at work, and a Mac keyboard at home, each one can have its own modifier-key settings.

.Mac The .Mac pane is in most respects unchanged, but it reveals some new features of .Mac itself. For example, you can now use .Mac to sync Dashboard widgets, Dock contents, notes, preferences, and settings between multiple Macs—a cool feature if you split your time between computers (for example, work and home, or desktop and laptop). The Account tab also displays an improved summary of your account: type, storage, expiration date, and more.

Also new to the .Mac pane is a tab that lets you enable Leopard's new Back To My Mac feature, which uses your .Mac account to keep track of your Mac's location on the Internet. This lets you access it—for example, for file sharing or screen sharing—from any other Mac without having to worry about dynamic IP addresses, router-port forwarding, or other technical obstacles.

Network Leopard's Network pane, although functionally similar to Tiger's, is among the most visually distinctive; Apple has

iCal 3



Leopard's version of iCal gets some nice new editing tools and a clean new look. But the biggest news is that it now supports group scheduling—if you have the right server software.

What's New

Group scheduling may be the biggest addition, but it's not the only one.

Consistent Look The new iCal is visually much more consistent with the rest of OS X. Brushed metal gives way to solid gray. The frames separating the calendar list from the main calendar are gone. The search field moves from center bottom to upper right.

Faster to Use The editing interface has also changed. In the new iCal, when you double-click on an appointment, a box pops up right next to the appointment; to edit details, you

click on the Edit button in that box.

Group Scheduling

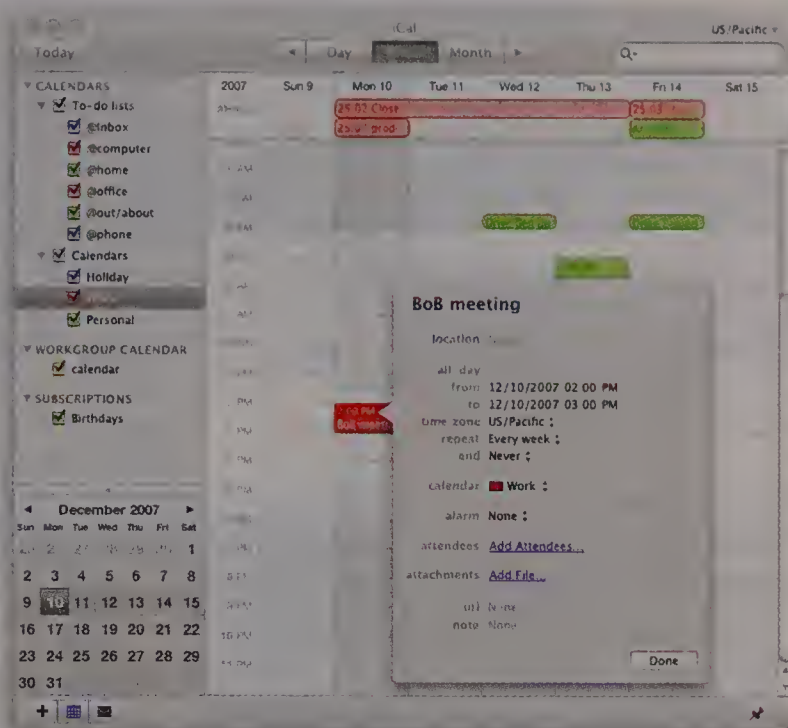
The most significant change is that iCal can now do group scheduling. That means you can schedule meetings with coworkers, check on their availability, and book resources (such as conference rooms and projectors), all within iCal.

To make group scheduling work, however, you need to be running server software that complies with the CalDAV

calendar standard. Not surprisingly, the new version of OS X Server (Leopard Server) is compliant.

How Well It Works

While iCal's new group-scheduling tools do work as advertised, they work only if there's a CalDAV server somewhere on



Easier Entry iCal now lets you double click on an event to edit its details in-line, rather than in a drawer to the side.

your LAN. Otherwise, iCal 3 amounts to a nice but relatively minor interface-lift.

Who It's Good For

The interface tweaks make iCal a welcome upgrade for current loyalists, but may not convince anyone to switch. Its group scheduling tools, though, would suit any small business or workgroup.

completely redesigned it. Each network port configuration (AirPort, Ethernet, Bluetooth, and so on) in the current network location is listed on the left side, accompanied by a status display; select one, and its basic settings—the ones you'll most likely need to access—are displayed on the right.

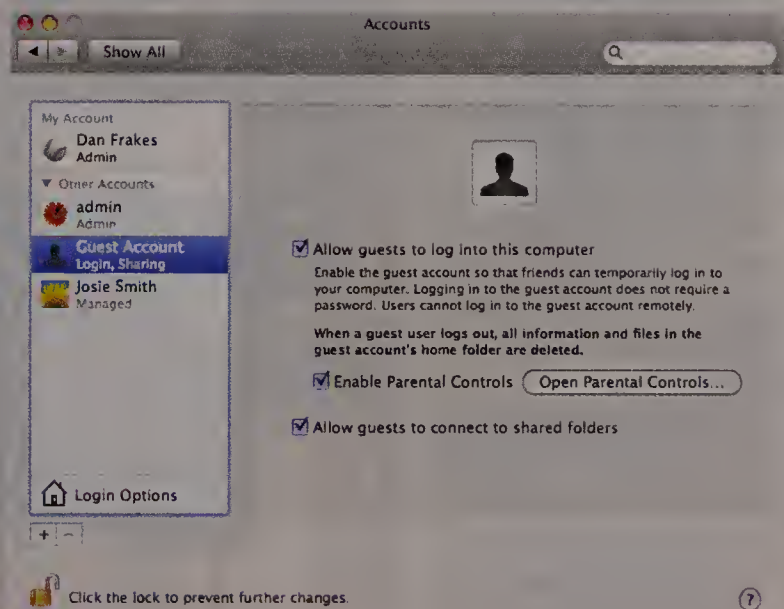
Sharing Another pane that has seen a major—and welcome—organizational overhaul is Sharing. The new service that stands out is Screen Sharing, which lets other computers on your network (or on the Internet) access and control your Mac using VNC (Virtual Network Computing). Although not new to Leopard, this screen-sharing feature used to be hidden away in the Access Privileges tab of Apple Remote Desktop—and as a result you couldn't enable it unless Apple Remote Desktop was turned on. In Leopard, it gets its own service listing, where you can allow screen sharing, as well as standard VNC access, for anyone or just for particular users.

Accounts The Accounts pane's new layout is much cleaner than the layout in Tiger. It has only two tabs of settings for your own

account—Password and Login Items—and only one tab for changing the account password for other accounts.

A new Guest account appears in the list of accounts. This account, when enabled, lets someone without an account on your Mac use it temporarily. Guest doesn't require a password and doesn't have administrator access. Once the guest user logs out, all data and settings in that account's Home folder are deleted—the account is wiped clean for the next guest user.

Advanced users will appreciate another new feature in the Accounts pane: by control-clicking (or right-clicking with a multibutton mouse) on an account in the list, you can access an Advanced Options tab for that account. Here you can change



an account's user ID, group ID, and login shell. You can also add account aliases. Even more welcome is the ability to change the short user name of your account and the path and name of your Home directory. (However, you shouldn't change any of these things unless you know exactly what you're doing—that's why they're hidden.)



Mail 3



Mail is perhaps one of the most commonly used programs in OS X, and it's among the Leopard components that have received the most attention from Apple.

What's New

While not all of Mail's new features will appeal to everyone, there are plenty of changes that will please the vast majority of users.

Simple Account Setup Apple's new account setup will allow many people to start using Mail by simply typing in an e-mail address. Mail already knows the settings for 30 of the most popular e-mail services, including Yahoo, AOL, Gmail, Verizon, AT&T, and Comcast. After you type in your e-mail address, Mail takes care of everything else for you. (If you don't have one of the services that Mail automatically recognizes, you will have to set up the accounts manually, as with the previous version.)

Archive Mailboxes If you have years' worth of e-mail that you just don't want to throw away, archiving is the perfect option, and it's very easy. All you have to do is highlight a mailbox or folder you want to archive, and then select Archive Mailbox from the Mailbox menu.

Data Detectors A very cool new feature in Mail, Data Detectors automatically detects snippets of text that you can perform an action on. For instance, if someone sends you an e-mail with an address in the body, simply click on the arrow that appears when you mouse over the address—and then create a new contact using that information.

Notes Have you ever opened a blank e-mail message for taking notes and then saved it as a draft? You don't have to do that anymore. Mail now includes a built-in Notes feature, which can handle colored text, graphics, and attachments, so you can keep everything you need to jot down close by. You can also group notes into smart mailboxes or folders, and access them via IMAP from a Mac, a PC, or an iPhone.

To-Dos For many people, To-Dos are as important as Notes. Apple has made it easy to create a new To-Do from within a Mail message or note. All you have to do is highlight a bit of text in the message and then click on the To-Do button in Mail's button row. You can also set a due date, an alarm, and a priority. (To-Dos are instantly added to iCal when you create them in Mail.)

Duplicate a Smart Mailbox Mail now lets you duplicate a smart mail-

box. This comes in very handy if you want a new mailbox similar to one you already have.

RSS Apple may be late to the RSS party, but the company has finally included a way for users to check RSS feeds in Mail.

Stationery and Rich Formatting If you send a lot of HTML e-mail, the new Stationery feature in Mail was made for you. Apple has included more than 30 professionally designed stationery templates that make sending an HTML e-mail a breeze. The templates include fonts, and they let you drag and drop photos for personalizing your e-mails. Most important,

the templates employ standard HTML, so all of your Windows-using friends can read them too.

Improved Search Apple says that Mail has improved searching, with better relevance for everything in Mail results including To-Dos, Notes, and e-mail messages. Searching certainly is a lot quicker in Leopard, and the relevancy of the messages it finds has always been good.

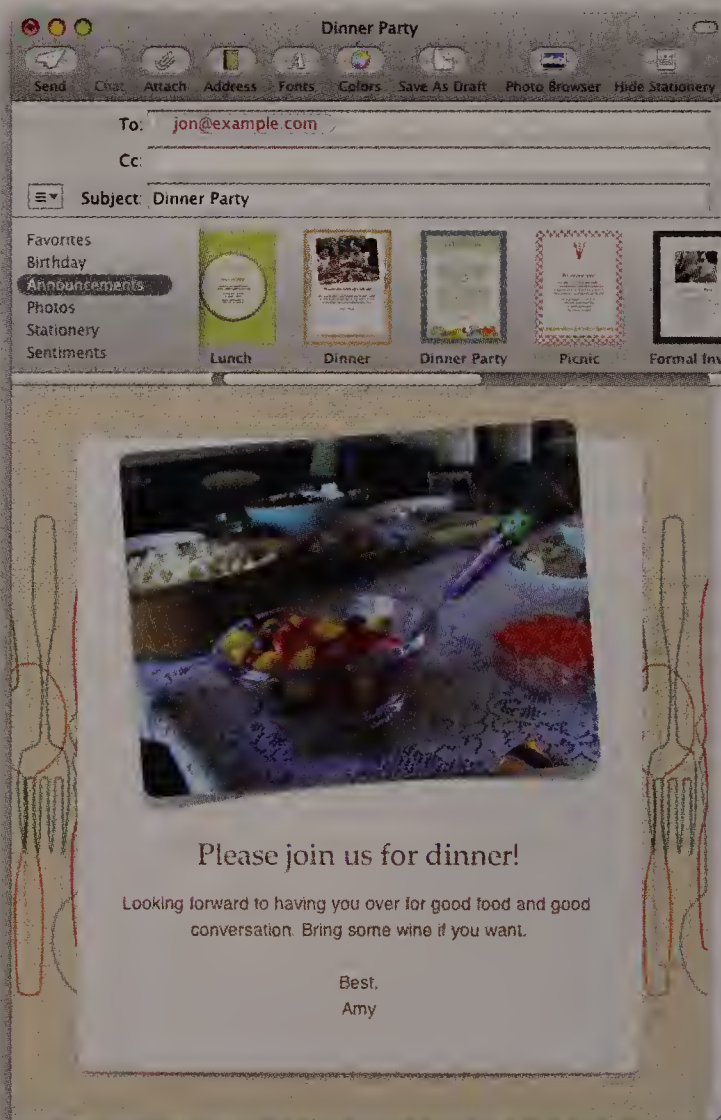
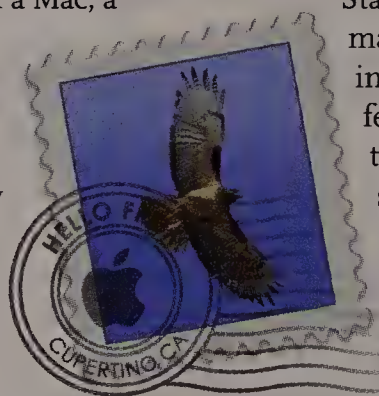
How Well It Works

Overall, Mail has become more useful, while maintaining its ease of use. Using To-Dos and Notes is drop-dead simple, and syncing with iCal happens automatically—just the way it should.

Who It's Good For

Mail 3 is good for everyone. Even those of us who consider ourselves power users enjoy it. The added Stationery feature and the simplicity of setting up accounts will win a lot of new people over right away. ❌

The following people contributed to this article: Senior Editor **Christopher Breen**, Senior Reviews Editor **Jackie Dove**, Senior Editor **Dan Frakes**, Lab Director **James Galbraith**, Senior Editor **Rob Griffiths**, Executive Editor **Dan Miller**, Senior News Editor **Jonathan Seff**, Editorial Director **Jason Snell**, Senior Associate Reviews Editor **Eric Suesz**, and Senior Features Editor **Kelly Turner**; and Macworld.com News Director **Jim Dalrymple**.



Stationery Mail adds stationery templates for pretty—or, to some people, annoying—HTML messages.



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29
ways to
save time
and work
smarter in
iLife '08

Working with photos, video, and music is supposed to be fun—a fact that's easy to forget when you've been hunched over your computer for hours trying to finish up your latest masterpiece. But being creative doesn't have to be a pain. iLife '08 is packed with hidden features and timesaving tools that will help you zip through your next project.

ILLUSTRATION BY MICHAEL SLACK



[iPhoto

By choosing the right settings and employing some savvy shortcuts, you can spend more time admiring your photos and less time managing them.
BY JIM HEID



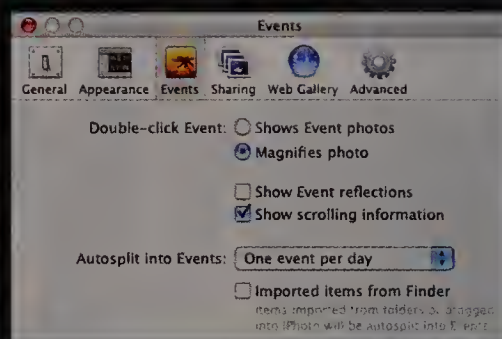
Cropping by the Rules

When you use the revamped Crop tool, iPhoto displays a grid that divides the crop area into thirds. You can often improve the composition of a photo by placing its subject along one of the inner lines of this grid. This composition technique is called the “rule of thirds.”

DOUBLE-CLICK TO ZOOM

If you double-click on a photo while skimming through an event’s thumbnails, iPhoto opens a pane with all the event’s photos—not just the one you clicked on. To change that behavior, choose iPhoto: Preferences, click on the Events tab, and then set the Double-Click Event menu to Magnifies Photo. Now when you’re skimming across an event, you can simply double-click on a photo to magnify it.

Click on the Show Photos button at the bottom of each event’s thumbnail to view all the photos (or press the return key).



Quickly Set a Key Photo

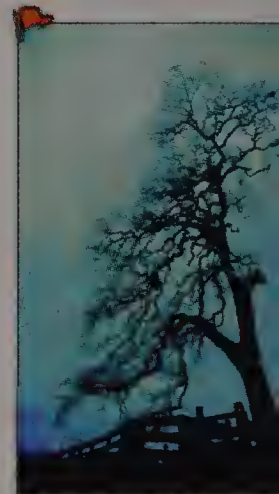
Each iPhoto event is represented by one photo, called the *key photo*. iPhoto uses an event’s first photo as the key photo, but you can change that. To quickly choose a different image, skim across the event until you see the photo you want, and then press the spacebar.

Move en Masse

Got photos stashed across your library that you want to store in a new event? Rather than moving them a few at a time, use the new flag feature. Flagging a shot is like attaching a sticky note or a paper clip to it.

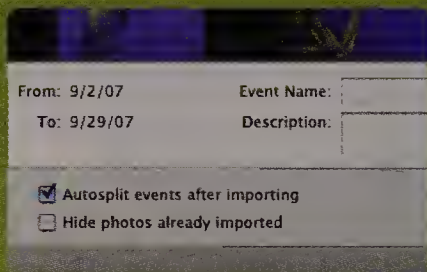
Select a photo you want to flag, and then click on the Flag button or press ⌘-period (,). After flagging all the shots you want to store in your new event, choose Events: Create Event From Flagged Photos. iPhoto will move the photos from their current locations and stash them in a new event.

Then, to quickly clear all the flags in your library, click on the small numeral to the right of the Flagged item under the Recent section of your Library list.



AVOID DUPLICATES

It’s a common scenario: You import some shots but then forget to erase your memory card before shooting more photos. The next time you plug in your camera, you’re stuck trying to remember which photos you’ve already imported. In iPhoto ’08, there’s an easy fix. In the Import pane, simply select the Hide Photos Already Imported option. Thumbnails for photos that are in your library will vanish from the Import pane.



Reaching for the Top

Every year, the small town of Elk, California (population: 350) celebrates the summer during the Great Day in Elk.

The Great Day in Elk is part community festival, part Woodstock, part Mardi Gras, part block party, and part dog party—all taking place about 50 yards from some of the most spectacular coastal scenery in the world.

Benches made of hay bales circle a grassed pool that is smudged with bills whose denomination increases with height. Watermelon-eating contests, margaritas, food, music, and plenty of distractively Mendocino local color round out a scene that is blissfully unchanging, year after year.

What is the Great Day in Elk? A great day.

Use a Photo as Your Background

When you’re creating a book, iPhoto ’08 lets you use a photo as the background of a book page, with photos and text layered on top. In the book editor, select the page to which you want to apply the background image, open the Background pop-up menu, and select the option with a palm-tree icon. Then drag a photo onto the book page, being careful to avoid any photo boxes. To make the photo lighter so that it doesn’t overwhelm the text on the page, click on the background image once, and then use the opacity slider that appears above the photo.

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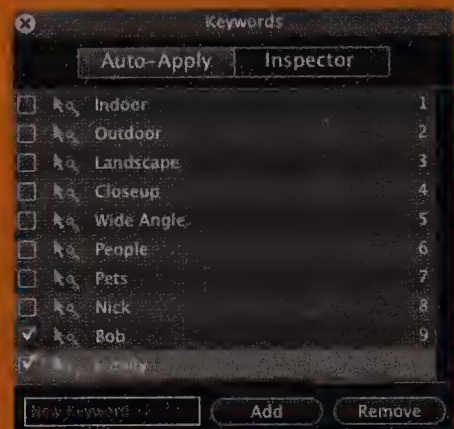
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iMovie

The newest version of Apple's consumer video-editing program bears almost no resemblance to its predecessor. But these tips should help you feel right at home.
BY MIKE CURTIS AND JIM HEID



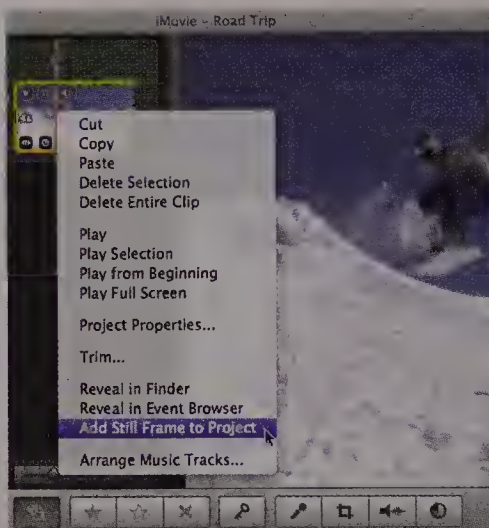
MAKE CLIPS SEARCHABLE

To make managing a large video library easier, iMovie '08 lets you apply keywords to your clips. But the feature isn't turned on by default. Select iMovie: Preferences and turn on the Show Advanced Tools option. Use your cursor to select a section of video—you can assign keywords to entire clips or portions of clips—and then click on the newly added key icon in the toolbar. This opens the Keywords pane. Click to place a check mark next to the keywords you want to apply, or type a new one in the text field and click on Add. You can apply as many keywords to a clip as you want.

To use keywords to track down clips, select Window: Keyword Filter. In the resulting pane, place a check mark next to keywords you want to filter by. To search for clips that *don't* include a specific keyword, select Exclude at the bottom of the pane.

Hide Your Goofs

Why waste time combing through bad video? You can highlight a clip portion you don't like and press R to reject it. iMovie will remove the video from your event browser. But don't worry—the clips aren't thrown away. To reveal your rejected clips, select View: All Clips or View: Rejected Only.

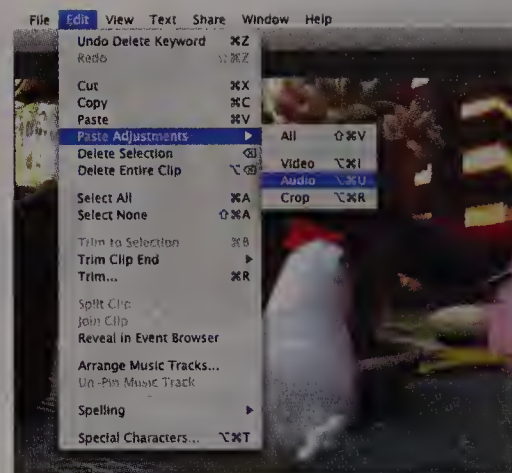


Freeze Frames

iMovie 7.1, a free update released in September, lets you create a still frame from a video clip. This is particularly useful for title sequences. Position the cursor at the very beginning of the first clip, control-click, and then choose Add Still Frame to Project. iMovie creates a still frame and adds it to the end of the project. Drag that still frame to the front of the project, just before the clip where it originated, and then add a title. To adjust the duration of the frame, choose Edit: Set Duration. Now when the title text disappears, the scene will spring to life.

Make Titles TV-Friendly

If you're creating a movie that will be viewed on a TV, don't use the subtitle lines of iMovie's Title styles. Most TVs cut off the outer edges of video frames, including where these subtitles appear. (The exception is the Centered title.) And if you use any of the left-aligned title styles, bump the text to the right a bit by pressing the spacebar a few times.

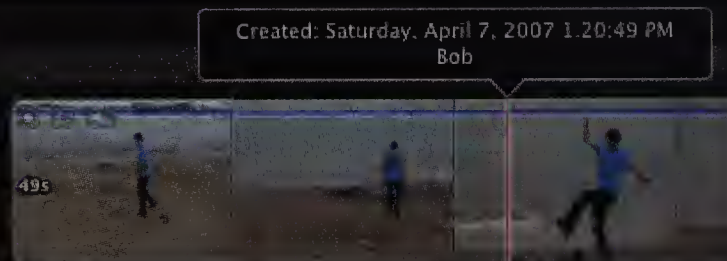


Copy Effects

Once you've perfected the panning motion or muted the audio in one clip, you don't need to repeat the effort. iMovie lets you copy adjustments to other clips. For example, to mute the audio for all clips in a movie, mute the first clip and then choose Edit: Copy. Select the rest of the clips, and choose Edit: Paste Adjustments: Audio.

GET INFO

To quickly see which keywords you've applied to a clip, as well as the date and time it was shot, press ⌘-Y. Then, as you move your cursor over different clips, a status display with the relevant information will appear above your cursor. To conceal it, press ⌘-Y again.



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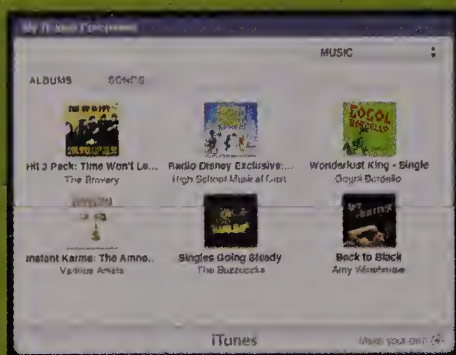


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iWeb

Apple's template-driven HTML program takes the stress out of building Web sites. But if you crave some creative freedom, these secrets can help.

BY JASON CRANFORD TEAGUE



SHARE AN iTunes PLAYLIST

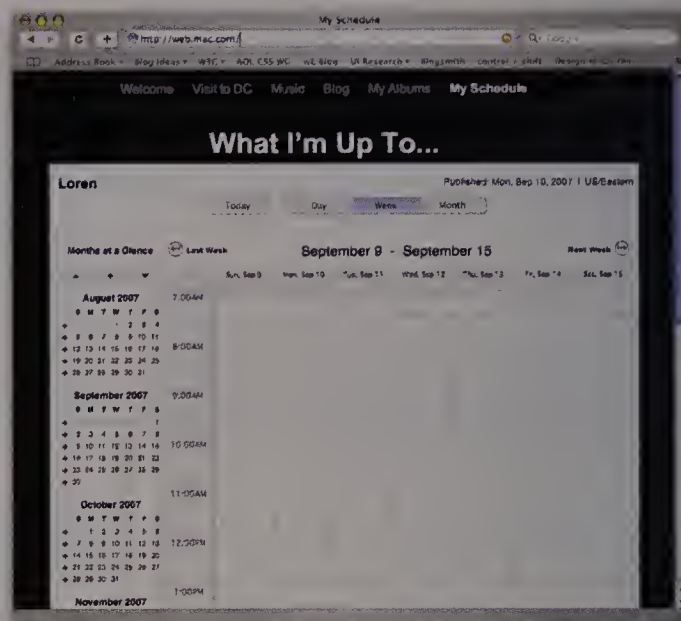
Want to show off your outstanding taste in music? Although iWeb won't let you play protected music files on your site, you can share your carefully constructed iTunes playlists. Simply drag a playlist from the Audio tab in the Media Browser directly onto a Web page. You'll get a list of links to the iTunes Store; visitors can use those links to preview and buy recommended tunes.

To offer even more musical insight—including your favorite artists, music reviews, and your latest purchases—add the My iTunes widget from the iTunes Store. To find the code, go to the iTunes Store and click on Account. On the Apple Account Information Page, click on the Manage My iTunes button. (If this is your first time, the button will read Enable My iTunes.) Select the information you want to add to your site, and then click on the Get HTML Code button. Specify how you want the widget to appear, and then click on the Copy Code button. Back in iWeb, click on the Web Widgets button and select HTML Snippet. Paste the code (⌘-V) into the empty field and click on Apply. Your list will now appear in your Web page and will dynamically update with new purchases, favorites, and reviews.

Show Off Your Schedule

With the help of a simple HTML tag, you can incorporate external Web pages into your iWeb designs. This can be useful, for example, if you want to include your published iCal calendar on your Web site.

To set this up, add a page to your site using one of the blank templates. In the Page Inspector, click on the Layout tab and change the Content Width setting to 775 px (you can adjust this later if you like). Choose Insert: HTML Snippet, and in the resulting dialog box, type `<iframe src="your-ical-url" style="width:100%;height:100%;border:none;"></iframe>`. Replace **your-ical-url** with the URL for your published iCal calendar. Finally, use the Metrics Inspector to resize the snippet to 775 px wide and 1,100 px tall. Your iCal calendar will now appear on your Web site and will automatically update as you make changes.



Separate Your Sites

You can easily create multiple Web sites in iWeb by pressing ⌘-shift-N. However, because iWeb stores all of your site assets in one file, you can't update sites separately—each time you make a change, you'll have to wait for iWeb to reexport all your sites.



Domain.sites2

To work around this problem, open your user folder and navigate to /Library/Application Support/iWeb. You'll see a Domain.sites2 file (or just Domain, if you've hidden file extensions), which holds all the information for your sites. In the iWeb folder, create a new folder for each site you want to manage, and place a copy of the Domain.sites2 file in each folder. To switch between your iWeb sites, you'll need to quit iWeb, open the folder for the new site, and double-click on the Domain.sites2 file.

FIND IT IN A HURRY

If you need to find a particular line of text on a Web page you're editing, press ⌘-F, type in the search term, and click on Find. To find the next occurrence, press ⌘-G. To find a previous occurrence, use ⌘-shift-G.

Create Templates

Once you've set up your Web page exactly the way you want it, why not use this page design for other parts of your site? iWeb doesn't let you set up your own templates, but you can work around this limitation. Create a new site (⌘-shift-N). In the Site Inspector, give the site a name like My Templates. Now select the page you want to use as a template, and press ⌘-D to duplicate it. Drag the duplicated file into your template site and rename it. Now, whenever you need that page design, simply duplicate it again, drag the duplicated page into the desired spot in your site, and start editing.



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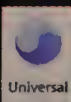
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NoteBook is available at:

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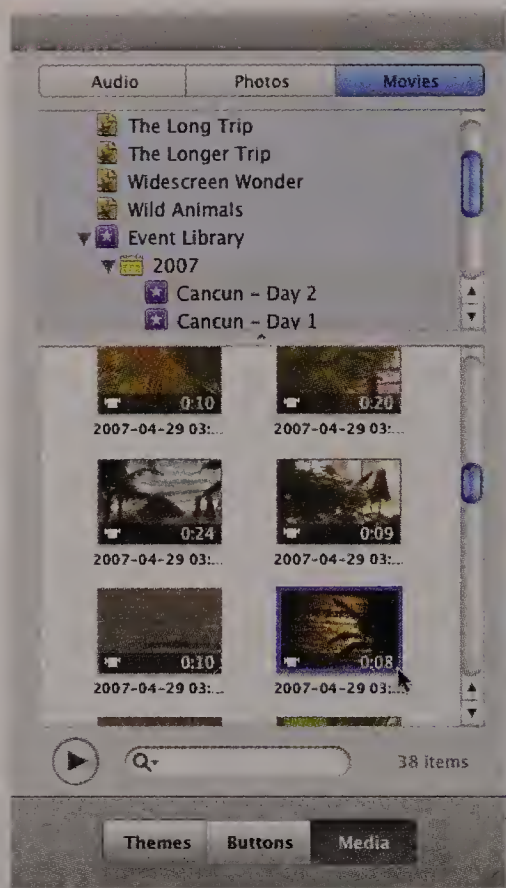


Small Dog
Electronics

TEKSERVE

iDVD

With movies, photos, songs, and sound effects, your Mac is a treasure trove of media files. Learn how to use these goodies to give your next DVD project professional polish.
BY JEFF CARLSON

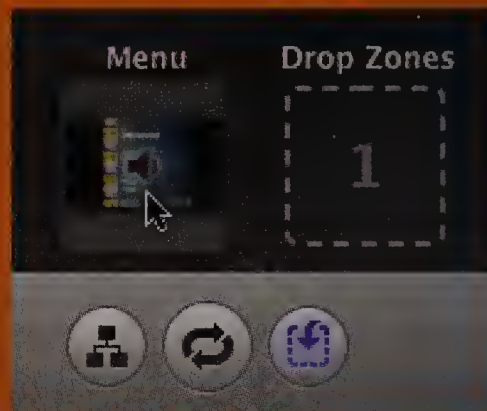


Import Any iMovie Clip

Because iMovie '08 keeps track of all your video, you can grab any clip that you've imported, even if you're not using it in a movie project. Open the Movies tab of iDVD's Media pane, expand the Event Library item, and then select one of the thumbnails that appear. To use just a small portion of a longer clip, add the clip to a drop zone, click on the drop zone in the menu, and then use the Movie Start and Movie End sliders to adjust length.

CHANGE THE BACKGROUND MUSIC

You probably already know that you can replace a theme's default background music with a song from your iTunes library. But that's not your only option. You can also use the audio from one of your video clips. Instead of dragging a video file from the Media pane to the Menu well (which sets it as the menu's background video), drag the clip to the Audio well in the Inspector (View: Show Inspector). Don't want any music at all? To quickly mute the default tune, click on the Edit Drop Zones button, and then click on the speaker icon in the middle of the Menu well.



Find More Sounds

iLife provides a rich library of audio tracks, including scratching records, a cheering crowd, and the ambient sounds of city streets and the ocean. You can't access these sound effects from within iDVD (unless you build a song in GarageBand first), but they're easy to locate on your hard drive. In the Finder, go to Library: Audio: Apple Loops: Apple: iLife Sound Effects. Choose a file and drag it into the iDVD menu or the Inspector's Audio well.

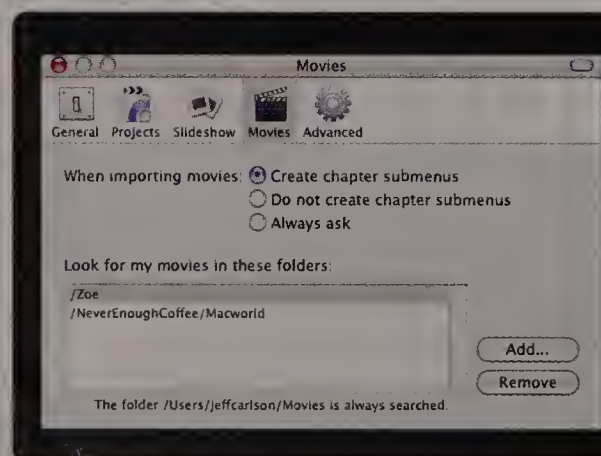
Make a List

By default, the Media pane displays movies and photos as thumbnails. But if you find these thumbnails hard to navigate, you can switch to a list view. Simply control-click in the pane's preview area, and choose Display As List from the contextual menu. To choose which columns appear in the list view, control-click again and choose Show Columns.

Get an Accurate Preview

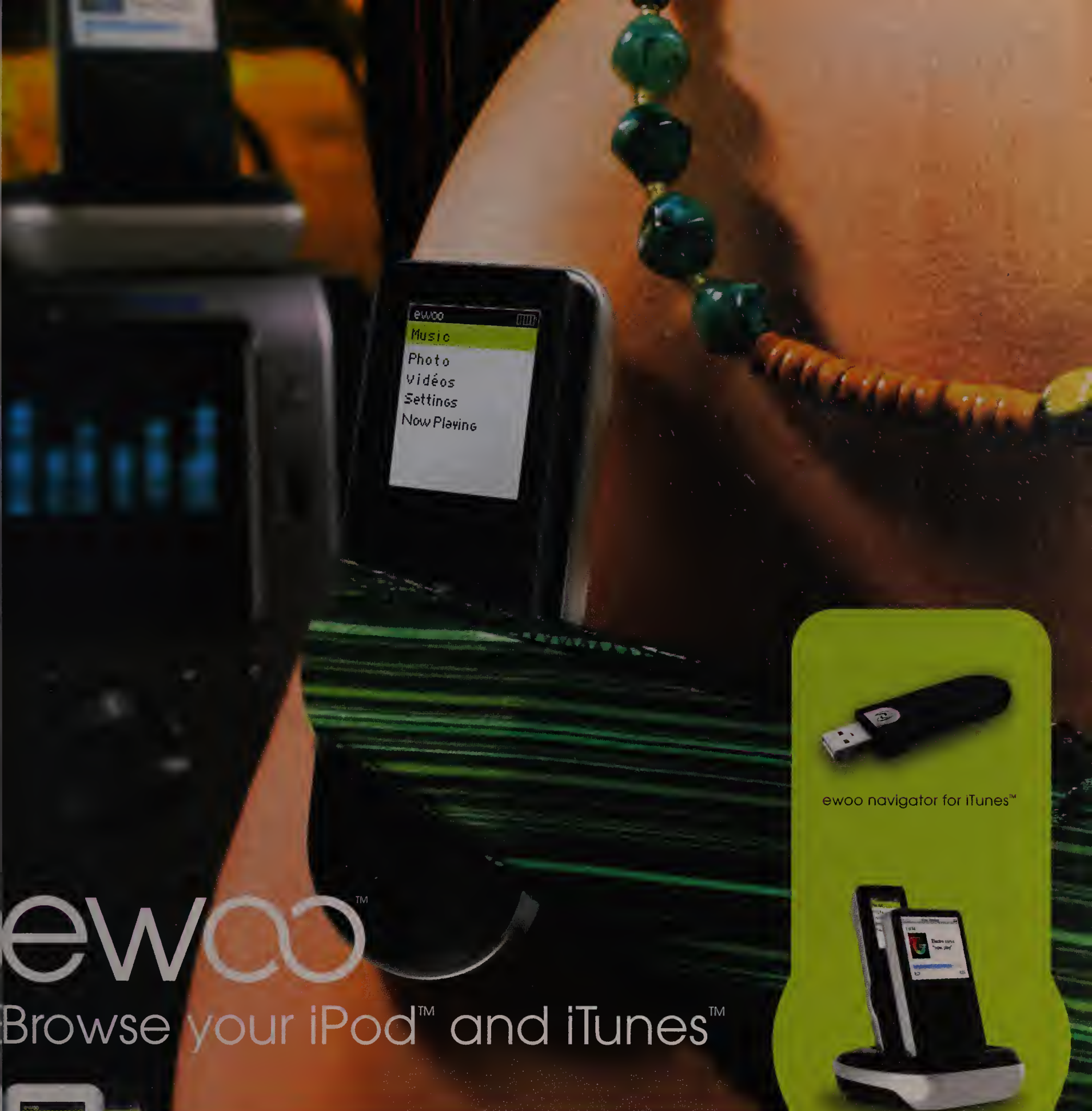
iDVD's preview mode gives you a good idea of how your project will look when played by a DVD player, but what you're seeing is still original footage—it's not encoded as it would be on a DVD. To get a better sense of the quality of the finished product, without burning lots of discs, create a disc image. From the File menu, choose Save As Disc Image (or press ⌘-shift-R). iDVD goes through the entire process of encoding the content, except the final step of burning a disc. When iDVD finishes, double-click on the .img file that was created; this mounts the file as a volume on your desktop.

Launch DVD Player (from the Applications folder) and choose File: Open DVD Media. Locate the VIDEO_TS folder in the disc image, and watch your project unspool. If the project looks good, you can then burn a DVD from the Finder without having to reencode your project in iDVD.



HIDE AND SEEK

To keep the Media pane up-to-date, iDVD monitors the likeliest locations for movie files on your hard drive. But if you store your video clips elsewhere—for example, on an external hard drive—you can clue iDVD in. Open iDVD's Movies preference pane, and click on the Add button to specify a new location. When you return to the Media pane, you'll see a new Folders option in the Movies section.

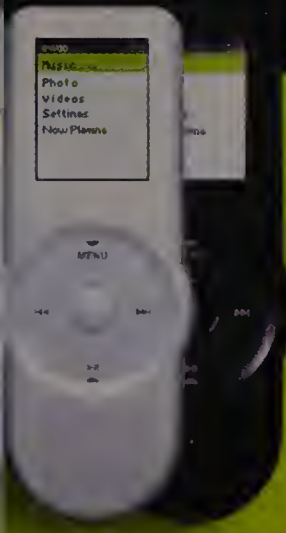


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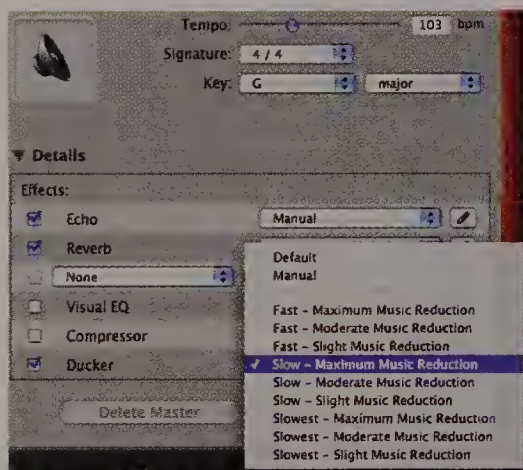
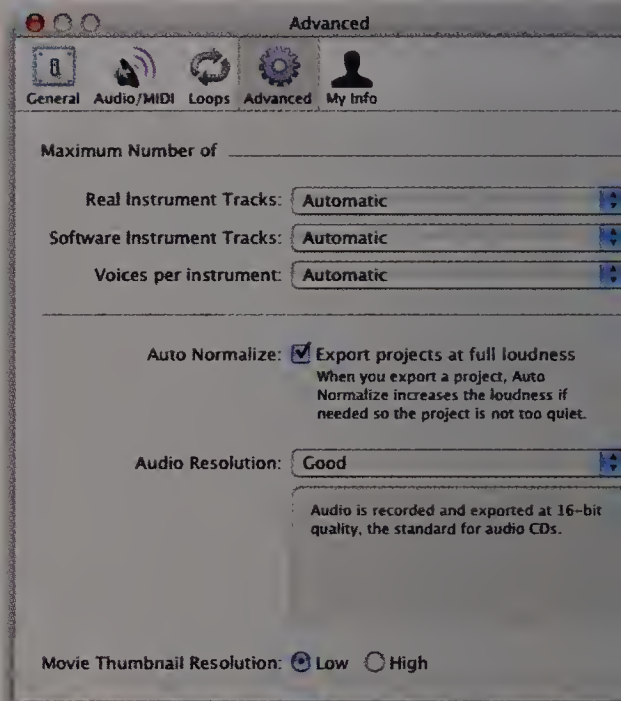
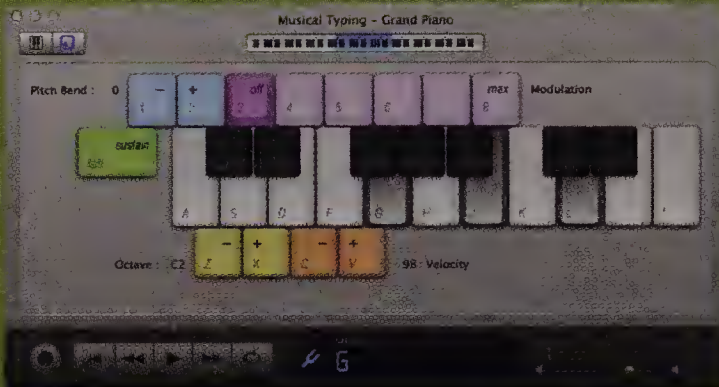
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GarageBand

From new settings to hidden displays, these helpful hints will keep you in tune with Apple's music studio.
BY CHRISTOPHER BREEN

CHORD DISPLAY

Wonder what chord you're playing on your MIDI keyboard, or on your Mac's keyboard when you're using the Musical Typing window? GarageBand will tell you. While you're playing into a Software Instrument track, select Chord from the LCD display. As you play, GarageBand spells out the chord name for you.

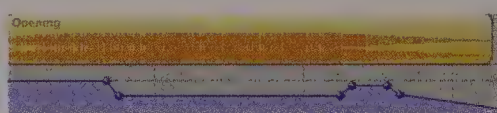


Duck Adjust

You can set GarageBand '08 to automatically reduce the volume of a background track when another track starts playing. But if the volume changes seem too abrupt, you can fine-tune them. Choose Track: Show Master Track, and press ⌘-I to display the Track Info pane. Open the Details section, and use the Ducker pull-down menu to select the speed and degree of volume change. You can also select Manual to configure the Ducker settings as you like.

Locate Additional Loops

Can't find the Real Instrument loops you want? Try a different key. Choose Control: Show Loop Browser, and select Project from the LCD display. Click on the Key entry and choose a different key from the pop-up menu—one that's a few whole steps away from the current key. The available loops should change. (This is because loops are recorded for specific key ranges.)



Moving Automation

In previous versions of GarageBand, you had to redraw customized volume curves each time you moved the audio to a different place in the timeline—a common problem for podcasters. No more. Just select Control: Lock Automation Curves To Regions.

Best Isn't Always Better

In the Advanced tab of GarageBand's preferences is the Audio Resolution pop-up menu, which lets you choose Good, Better, or Best quality. Be careful about using Best (24-bit) quality, as iTunes is incapable of converting the resulting files to mono MP3 (a format popular with podcasters) or AAC files. For exported podcasts, use the Good quality setting instead.

Christopher Breen is a musician, and a senior editor for *Macworld*. **Jeff Carlson** is the managing editor of TidBits (www.tidbits.com) and the author of the forthcoming *iMovie '08 and iDVD '08 for Mac OS X: Visual QuickStart Guide* (Peachpit Press, 2007). **Mike Curtis** runs HD for Indies (www.hdforindies.com), a consultancy and Web site focused on high-definition video and film production, with an emphasis on HD cameras and workflow, as well as post-production hardware and software. Senior Contributor **Jim Heid** specializes in digital media and is the author of the forthcoming *The Macintosh iLife '08* (Peachpit Press, 2008). **Jason Cranford Teague** is the Director of Web Design Standards for AOL Programming. He blogs about technology and culture at webbedenvironments.com.

SCROLL CONTROL

Tired of clicking on all those sliders and control knobs in GarageBand's interface? If your mouse has a scroll wheel, you can simply hover the cursor over a slider or control and, in most cases, adjust it by moving the scroll wheel—no clicking required.



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Macworld

Jump into Leopard

You've installed OS X 10.5. Now make it your own. **BY CHRISTOPHER BREEN**

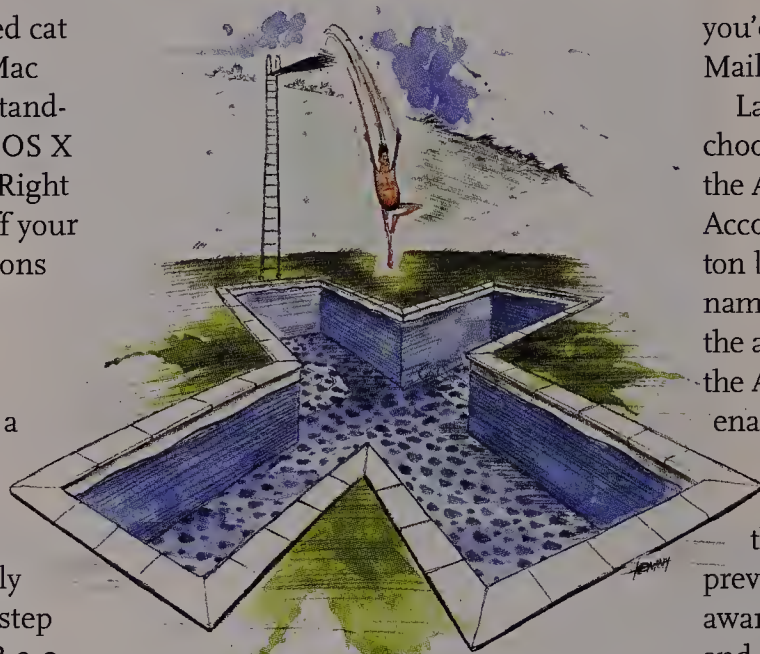
You've loaded the big spotted cat on your hard drive, your Mac has rebooted, and you're standing at the gateway of a brand-new OS X experience. Where do you begin? Right here. I'll show you ways to start off your Mac OS X 10.5 (Leopard) explorations on the right foot.

Travel to Time Machine

For the first time, Apple has built a backup utility into the Mac OS. That utility, Time Machine, requires an additional hard drive for your data. If you don't currently have such a hard drive, your first step is to obtain one—an external USB 2.0, FireWire, or eSATA drive, or an internal SATA or ATA drive will do. (See macworld.com/2630 and macworld.com/0314 for some suggestions.) To be safe rather than sorry, you'll want a hard drive with a capacity matching or exceeding your startup drive's. That way you're less likely to lose older files when the backup drive gets full and Time Machine tosses the older files to make room for more recent versions.

Pick the Right Drive After it first launches in Leopard, your Mac looks for all compatible drives for your Time Machine backup and provides them in a list within a Time Machine dialog box. Select the one you want, and the Time Machine preference pane opens. Within this pane you can change disks and exclude drives, volumes, and items from the backup.

Include and Exclude Data To create a smaller safety net that captures just your documents instead of your whole system, you really only need to back up



your user folder. Click on Options and, in the resulting sheet, click on Plus. In the sheet that appears, locate Applications, Library, and System, and then click on the Exclude button after each choice. If you have other accounts on your Mac that you're not concerned about, you can exclude them as well.

Watch Your Destination Note that Time Machine will use the destination you select for *all* of the Mac's users. In other words, if you decide to change disks (an option in the Time Machine preference pane), that change will apply to all other accounts on the Mac. Also, when you change disks, you won't have access to your Time Machine archive from the original backup disk until you change back to that disk.

Set Up Your E-mail Account

During installation you're asked for your .Mac account information. If you have such an account, OS X automatically configures Mail to use it. But if

you'd like to add a different account, Mail makes that really easy, too.

Launch Mail (in /Applications), choose Mail: Preferences, and click on the Accounts tab. In the resulting Accounts window, click on the Plus button below the Accounts pane. Enter the name, e-mail address, and password for the account you want to create and leave the Automatically Set Up Account option enabled. When you click on Create,

Mail will attempt to automatically configure your account based on the account's e-mail address. Unlike previous versions of Mail, Leopard's is aware of all the major ISPs' IMAP, POP, and SMTP server settings.

Make Some Spaces

Spaces is a new Leopard program that allows you to jump quickly from one workspace to another with the press of a couple of keys or a mouse button. If you group particular tasks in separate workspaces, you can just switch spaces instead of constantly banging ⌘-tab to switch applications or digging through buried windows.

To configure Spaces, launch System Preferences, click on Exposé & Spaces, click on the Spaces tab, and select the Enable Spaces and Show Spaces In Menu Bar options. At the bottom of the window, you can change the keys you use to activate spaces (F8 by default), switch between spaces (control plus the arrow keys by default), and switch directly to a space (control plus the space's assigned number key). You can also direct Spaces to activate when you use a third-party mouse or trackball button (three, four, or five, for example).

To configure Spaces, click on the plus-sign (+) button next to Rows or Columns. Next, click on the small plus-sign button beneath the Application Assignments pane and choose programs you'd like to appear within certain spaces. For example, click on the plus sign, choose Safari, and, in the Application Assignments area, choose Space 2 from the Space pop-up menu. When you launch Safari in the future (or switch to it while it's running), it will appear in the workspace to which you've assigned it. Repeat these steps for other related programs so that particular kinds of work are gathered together in specific spaces—Mail, Address Book, and iCal in one space; iPhoto and iMovie in another; and Safari and iChat in another, for instance.

To make Spaces even slicker, move to the Account preference pane, click on the Login Items tab, click on the plus-sign button beneath the list of login items, and add those programs you included in Spaces (see "Special Spaces"). Now, when you log in or restart your Mac, the programs will automatically launch into their separate spaces at startup.

Soup Up the Sidebar and Dock

The old familiar Dock and the Finder window's Sidebar will seem a little less

familiar in Leopard. While they still provide easy access to volumes, programs, and folders, other elements of these items have changed. Here's how you can make the most of the new versions.

Organize Your Sidebar If you liked the way previous OS X versions placed commonly accessed folders, such as Movies, Music, and Pictures, in the Finder window's Sidebar, you can easily put them back. Just open your user folder and drag them to the Sidebar's Places area.

While you're in the Sidebar, you may also want to delete items from the Search area. By default, in this area you'll find searches based on time (Today, Yesterday, and Past Week) as well as kind (All Images, All Movies, and All Documents). But you may not want just anyone sitting at your computer to have one-touch access to your images and movies.

Drag an item out of the Sidebar to delete it.

Stack It Up Take this opportunity to put Leopard's new Stacks feature to good use by dragging your Applications folder to the Dock (by default Apple places your Documents folder in the Dock). When you do so and then click on the folder, a grid appears, displaying all your programs (see "Easily Access Applications"). Click on one to launch it. You can also drag documents over this folder and wait for the Applications window to appear. Drag a document on top of a



Easily Access Applications Take advantage of the Dock's newest trick to gain quick access to all your programs. Drag your Applications folder to the Dock to create a stack.

compatible program—for example, drag a JPEG on top of Preview—to open that item. You can also drag a collection of documents into the Dock to add them as a stack.

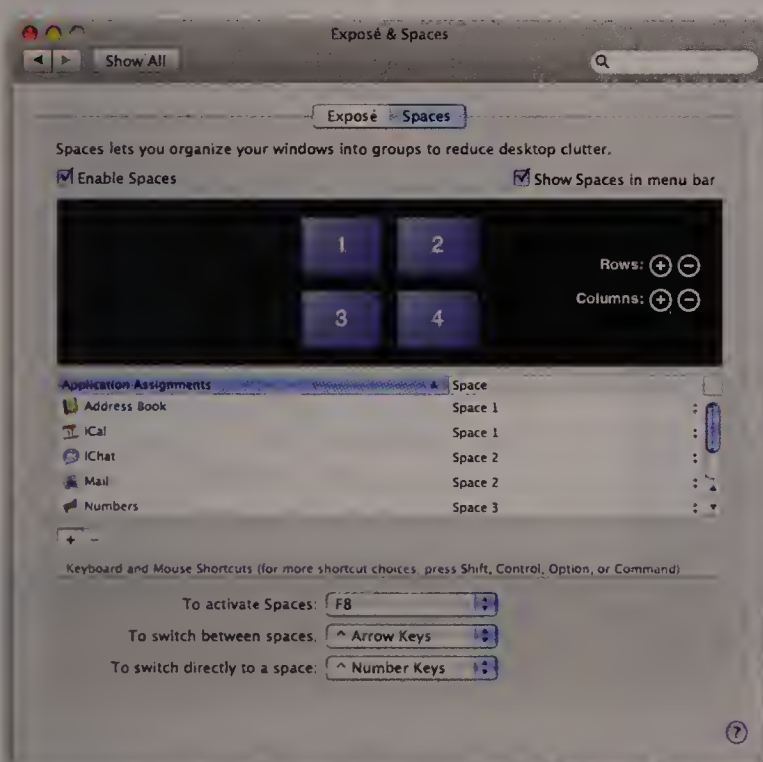
Hear Voices

If you've used previous versions of OS X, it's unlikely that you've done anything more with the Speech preference pane than opened it, listened to a couple of voices, and then moved on, unimpressed by the computerized voices. Today is the day to give OS X's speech capabilities another chance. Open Speech, click on the Text To Speech tab, select Alex from the System Voice pop-up menu, and click on Play. You'll probably be impressed by how lifelike Alex's voice is.

To put Alex to good use, enable the Speak Selected Text When The Key Is Pressed option, click on Set Key, and choose a memorable key combination (I use control-F9). Open a program such as TextEdit or Mail, highlight some text, and press that key combination to hear Alex pronounce your words trippingly on his virtual tongue.

Set Up a Troubleshooting Account

Macintosh troubleshooting experts recommend that you create an additional



Special Spaces Configure Spaces to place frequently used programs in separate workspaces. Then set Login Items to launch those programs when you log in.

“clean” user account—one that you leave entirely untouched after setting it up. The reason? Should things get wonky in your main account, you can switch to this troubleshooting account to see if the problem exists there as well. If it doesn’t, you know something is wrong with your main account—a corrupted preference or font, for exam-

ple. Knowing where the problem lies can help you solve it.

With that in mind, this is the time to launch the Accounts preference pane. Click on the Lock icon and enter your administrator password to unlock Accounts. Click on the plus-sign button at the bottom of the list of accounts, and create a new Standard account (one

that doesn’t have administrator permissions, so that it doesn’t let you install applications or alter certain system settings). Give it an intuitive name such as Troubleshooting. If your Mac misbehaves, switch to this account and see how your Mac reacts.

Make Your Mac Kid-Friendly

If you have kids, you probably have a number of concerns when it comes to their use of the fresh, newly upgraded family computer—they might muck about in your system, stumble across content that’s not age-appropriate, or just not know what to do with the overwhelming number of programs and files scattered across your desktop and Dock. If any of these issues rings a bell, don’t leave the Accounts preference pane yet.

Click on the plus-sign button once again and choose Managed With Parental Controls from the New Account pop-up menu. Enter a name, a short name, and a password for the account and click on Create Account. If you’re asked to turn off Automatic Login (which automatically boots your Mac into your user account), click on Turn Off Automatic Login in the dialog box that appears. It doesn’t do much good to impose Parental Controls if your kids are automatically logged in to your unprotected account.

Click on the Open Parental Controls button that appears in the Accounts window. Select the account you just created from the Accounts list. Within the Parental Controls tab you’ll find options for choosing exactly which programs and widgets the account can run; hiding profanity in Apple’s Dictionary; restricting Web-site access; limiting e-mail and iChat correspondents; setting time limits (to a certain number of hours per weekday and weekend, as well as preventing access during specified hours); and saving logs for Web sites visited and blocked, programs run, and iChat sessions. ☒

Senior Editor **Christopher Breen** is the author of *The iPhone Pocket Guide*, second edition; and *The iPod and iTunes Pocket Guide*, third edition (both from Peachpit Press, 2007).



TRY THIS

Clean Up Your Podcasts

It’s astonishing how many people are now producing podcasts. Even more amazing is the number of them who use nothing more complex than Apple’s GarageBand 3 (🔗; macworld.com/1134) or GarageBand ’08 (🔗; macworld.com/3085). Don’t get me wrong—GarageBand is a great application, but it’s pretty limited when it comes to cleaning up audio. Here are a few tools you can add to your podcaster’s toolkit.

Balancing Sound It’s pretty common to hear podcasts where one part of the podcast is loud—the opening, for example—and another is quiet—an interview segment, for instance. The Normalize effect in GarageBand ’08 gives you a good start on fixing this problem by raising the quiet volumes, but unfortunately it also makes the loud parts louder, so you still end up with a disparity. You can bring better balance to your audio with GigaVox Media’s free The Levelator (www.gigavox.com). The Levelator seeks to balance all parts of the podcast so that they have similar volume.

Reducing Noise Most podcasters work in less than pristine audio environments. Sounds from your computer, an air conditioner’s drone, or the constant hum from poorly grounded audio equipment can create annoying noise. GarageBand includes a measure of noise reduction in its Speech Enhancer effect, but you can do better. I’m quite happy with Bias’s SoundSoap 2 (\$129; macworld.com/3013). It’s a plug-in, so it works with a variety of audio editors (even GarageBand). And it couldn’t be easier to use. Just highlight the noise you want to eliminate and click on Learn Noise, and the annoyance disappears (see “Cancel Noise in Podcasts”). HairerSoft’s Amadeus Pro (\$40; macworld.com/3014) and Adobe’s \$199 Soundbooth CS3 (🔗; macworld.com/3015) have built-in noise filters as well.

Recording Interviews Many of the people you want to interview probably don’t live next door. So how do you record them? The free VoIP service Skype (www.skype.com), though prone to acting up, is currently the best way to go. The trick is that you need to record both sides of your Skype conversation. Several tools enable you to do this, including Rogue Amoeba’s Audio Hijack Pro (\$32; macworld.com/3016), Ambrosia Software’s WireTap Studio (\$69; www.ambrosiasw.com), and Ecamm Network’s Call Recorder (\$15; macworld.com/3017).



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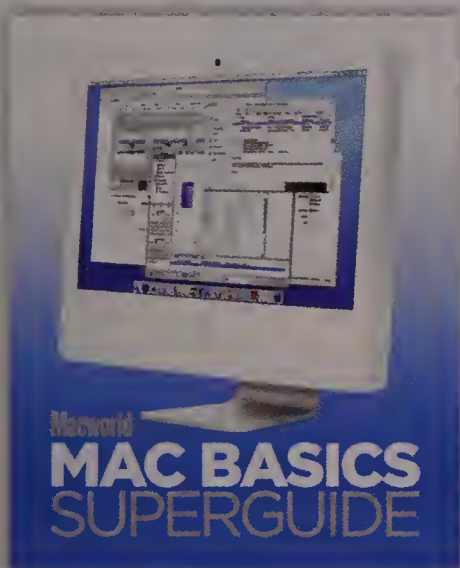
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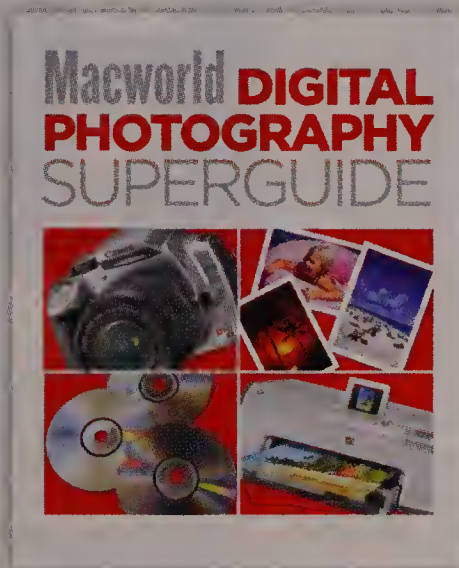


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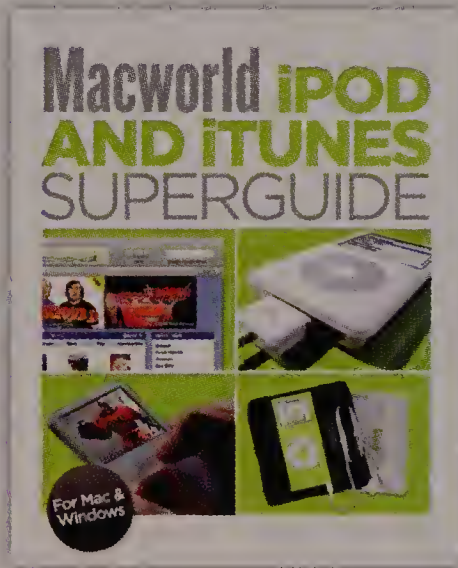
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Dealing with Digital Rights

Living with (and without) protected music **BY CHRISTOPHER BREEN**

In April 2007, Apple and England's EMI record label held a joint press conference to announce that individual tracks from EMI would be available at the iTunes Store in two forms—the current 99-cent copy-protected form and a new \$1.29 unprotected form, to be known as iTunes Plus.

Up to this point, the prevailing wisdom had been that downloadable music must be protected in such a way that it could not be easily copied or shared, thus preventing piracy. Apple's FairPlay digital rights management (DRM) technology was designed to do just that. You could play music purchased from the iTunes Store on as many as five authorized computers, as well as on a limitless number of iPods; you could burn the same playlist of protected songs as many as seven times; and you could burn the protected tracks to CD (at which point they were no longer protected). But if you tried to copy the digital files for a friend or post them to a peer-to-peer site, anyone downloading the tracks would be unable to play them. (Other music services such as Rhapsody, Yahoo Music, and Microsoft's Zune Marketplace offer their own forms of DRM, which are more restrictive than FairPlay.)

Apple seemingly understood that the DRM status quo was flawed. After all, the same music in the form of audio CDs was unprotected. If someone wanted to steal music and share it with the world, it was easy enough to buy the CD, rip it, and distribute its tracks via

playlist Want more tips on digital music?

For iPod- and iTunes-related expert advice and breaking news, as well as reviews of all the latest gadgets, check out Playlistmag.com.



iTunes Plus The iTunes Plus page is your gateway to Apple's higher-quality, DRM-free audio tracks and music videos.

peer-to-peer software. Why single out downloadable music for protection?

Alone among the major record labels, EMI was willing to take a chance and offer its catalog to Apple (and some other online services) in an unprotected form. And Apple was willing not only to strip the protection from the tracks, but also to offer them at higher bit rates—256-Kbps AAC versus the protected versions' 128 Kbps. EMI has offered a similar deal to Amazon.com, which now sells unprotected 256-Kbps MP3 files for an average price of 99 cents per track (the most popular DRM-free MP3 albums go for \$8.99). While EMI is the only major label to do this, vast numbers of independent labels have been offering their

music without protection on services such as eMusic (www.emusic.com) and Audio Lunchbox (www.audiolunchbox.com), and now on Amazon. In an apparent response to Amazon's music service, Apple quickly reduced the price of its iTunes Plus tracks to the standard 99 cents per track. It also began offering music from some independent labels in iTunes Plus form.

So if you prefer your music unprotected, what options do you have? Let's take a look.

The iTunes Store

The iTunes Store is many Mac users' first stop for music because it's integrated beautifully into iTunes.

Although iTunes Plus albums and tracks are marked as such on artist and album pages, you can find them in an easier way. Select the iTunes Store entry in iTunes' Source list and, in the Quick Links section of the store's interface, click on iTunes Plus. Here you'll find top albums and songs available in the iTunes Plus format, as well as a Genres pop-up menu that lets you view just pop or classical albums, for example (see "iTunes Plus").

If you've purchased FairPlay tracks from the iTunes Store that are now available in the iTunes Plus format, the Upgrade My Library entry in the upper right corner of the iTunes window will let you know which songs you can update and how much the total cost will be (Apple charges 30 cents for each song, 60 cents for each music video, and one-third the current album price for upgrading an entire album). Click on the See Details button, and you're taken to an Upgrade My Library screen where you can upgrade your tracks. Regrettably, Apple doesn't give you the option to upgrade individual songs in your iTunes library. You must upgrade all the tracks that are now available in the iTunes Plus format.

Before Apple followed Amazon's lead and reduced the price of its unprotected tracks, you could purchase either the 128-Kbps protected track or the 256-Kbps iTunes Plus



CHECK IT OUT

Opus No. 5

For those who consider plugging an iPod into a stereo system an insult to their ears, Olive Media has introduced Opus No. 5, a new edition of its digital music player designed to integrate into a home theater environment (www.olive.us).

The \$2,999 Opus No. 5 features Olive's Pure Audio System technology, developed with Texas Instruments to provide high-precision audio playback from digital sources. The device incorporates an optical disc reader—you insert audio CDs and click on the Record button, and Opus imports, tags, and archives the CD, using a built-in database of more than 2.4 million albums.

You can also build playlists of customized music that you can access with Olive's accompanying Rondo Web interface, either using a wired or wireless network. It can stream music from or to a Mac or PC. Opus No. 5 also lets you listen to streaming radio stations broadcast for free over the Internet.—PETER COHEN



track. Now that you can have the higher-quality unprotected track for the same price as the protected version, you can no longer purchase the smaller protected tracks. When an iTunes Plus track or album is available, that's the version you get.

It's worth noting that although iTunes Plus tracks are unprotected—meaning that you can share them with your friends or, conceivably, across the Internet—they're marked with identifying information. The e-mail address associated with your Apple ID is embedded in these files—so unless you want to risk the wrath of the music industry's legal beagles, you'll

want to keep these files to yourself.

Other Sources

iTunes is a late arrival to the party in terms of online music stores offering unprotected music. As mentioned earlier, services such as eMusic and Audio Lunchbox have each been selling unpro-

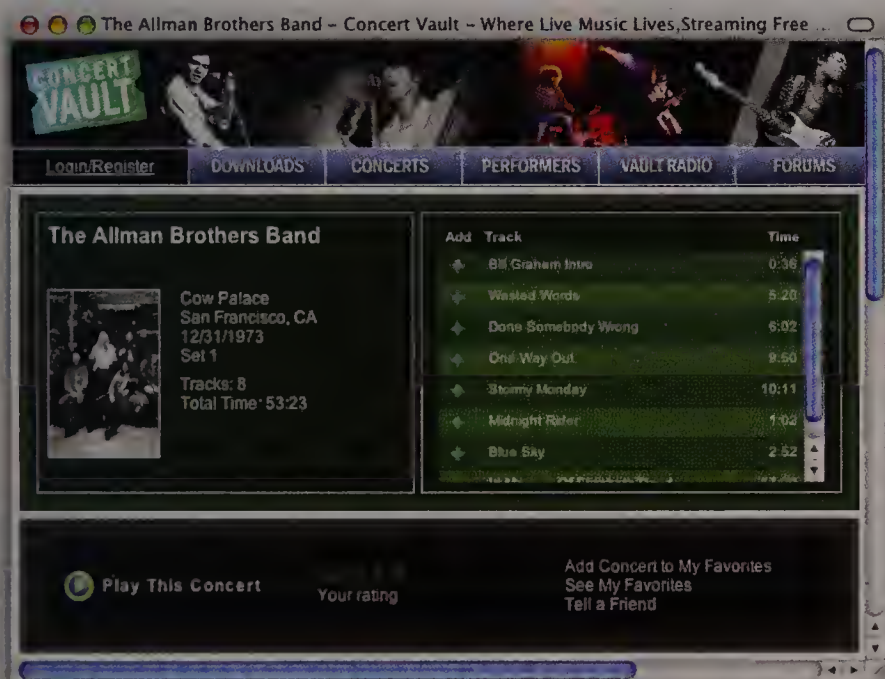
tected MP3 files (currently encoded at 192 Kbps) from their very inception. Amazon began selling unprotected MP3 files in late September 2007 and, unlike online merchants such as Wal-Mart and gBox, Amazon embraces the Mac platform instead of making its service compatible only with Windows PCs.

The Concert Vault site (concerts.wolfgangsvault.com) offers DRM-free MP3 concert recordings for \$10 per show (see "Concert Vault"). These tend to be older shows from the 1960s, 1970s, and 1980s. The Internet Archive (www.archive.org) also has live DRM-free concert recordings in its Live Music Archive section. These recordings are free and usually available in a variety of encoding formats including FLAC, Ogg Vorbis, and different flavors of MP3. The Large-hearted Boy (macworld.com/3141) blog includes the A to Z Guide To Online Music Downloads, which links you to multiple sources of free, unprotected music files. ❌

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Sound Check

Do high-bit-rate, DRM-free tracks sound better? Go to macworld.com/3146 for our test results.



Concert Vault If you're looking for old concert recordings, you can stream or purchase them from Concert Vault.

Your Photo Here

Turn your favorite shots into rock posters, night-lights, and more **BY KELLY TURNER**

How many photos did you take this past year? A few hundred? A few *thousand*? If you're anything like me, most of those photos are probably languishing on your hard drive, waiting to be rediscovered.

A print isn't the only way to show off your photographic endeavors. Whereas photo-based gifts were once limited to mouse pads and mugs, now you can customize far more interesting objects with your favorite pictures. For instance, you can find businesses that will turn your images into works of art, stylish accessories, even edible delights. And with the holiday season in full swing, photo creations can make for great presents, too. Here's a look at just some of

the cool stuff you can do with your photos. For more ideas, including stamps, coasters, and cookies, go to macworld.com/3229.

Drink Up

Want people to ooh and aah at your next party? Find a favorite snapshot of the guest of honor and have Jones Soda (www.myjones.com) personalize a case of pop by placing that person's photo on the bottle labels.

Before submitting the picture, you'll need to crop shots to a specific size and resolution using an image editor such as Adobe Photoshop CS3 (★★★★; \$649; www.macworld.com/2757) or Yellow Mug's EasyBatch-



Photo (\$24; www.yellowmug.com). The new version of Preview in OS X 10.5 can also do the job. You have the option of adding a photo credit along the side of the image and up to seven lines of text on the back of the label.

You can select from several flavors, such as Berry Lemonade, shown here. A case of 12 personalized sodas costs \$30, plus shipping, and can take up to four weeks for delivery.

Photos That Rock

Becoming a parent doesn't have to mean losing your cool factor. Show off your newest rock star by commissioning the husband-and-wife team at Rattle-n-Roll (www.rattle-n-roll.com) to create a customized concert poster with your little one's photo and birth details.

Simply select one of five templates, and then e-mail your child's picture along with important stats like name, date and time of birth, weight, and parents' names. Rattle-n-Roll uses the photo as inspiration for a hand-drawn illustration of your child. The resulting prints on white card stock are beautiful and

richly saturated. Of course, the service isn't *limited* to babies. Feel free to submit photos of teenagers, pets, or yourself.

As you'd expect with custom artwork, the posters will cost a pretty penny. For \$200, you get two 11-by-17-inch posters (additional prints are \$10 each). For \$250, you receive two posters and a pack of 50 8.5-by-5.5-inch postcards that you can send out as birth announcements or party invitations. The company can also create a unique design and customize the order to suit your whims, though you'll have to pay an additional fee.

A Light in the Dark

Brighten up a room with your child's smile—literally. After you submit your image file to Light Affection (www.lightaffection.com), the company carves the image into a piece of hard, translucent resin; frames it in black wood; and mounts it on a night-light. When turned on, the light shines through the carving's various layers to create the illusion of a backlit sepia-toned photo.

Take Home a Photo Expert



Is a new camera on your shopping list this season? The *Macworld Digital Photography Superguide* offers the latest advice for buying a camera,

shooting great images, scanning negatives, managing your library in iPhoto, polishing photos, and more—and it's updated for iPhoto '08 and the latest camera technologies. Get your copy at macworld.com/superguide.





Because the resulting image is fairly small (about 2.75 inches square), you'll get the best results from close-up shots featuring just one or two people and a relatively uncluttered background. The night-light costs \$40, plus shipping.

Instant Decorations

Sharing your photos should be just as fun—and easy—as taking them. Moo, a printing company based in London, understands that philosophy. The site (www.moo.com) lets you effortlessly pass along your favorite photos as note cards, stickers, or miniature cards. But unlike some similar services, Moo allows you to place a different photo on every sticker or card—letting you make the most of your collection.

With the company's newest offering, StickerBooks, you can submit as many as 90 different photos to create a pocket-size booklet of small glossy stickers—great for decking out packages, sealing envelopes, or just jazzing up boring surfaces. MiniCards are another favorite of mine. These thin 1-by-2.75-inch cards feature an image on one side and text on the other, making them ideal for use as gift tags. Plus, you can choose up to 100 different images to keep things varied. StickerBooks cost \$10,

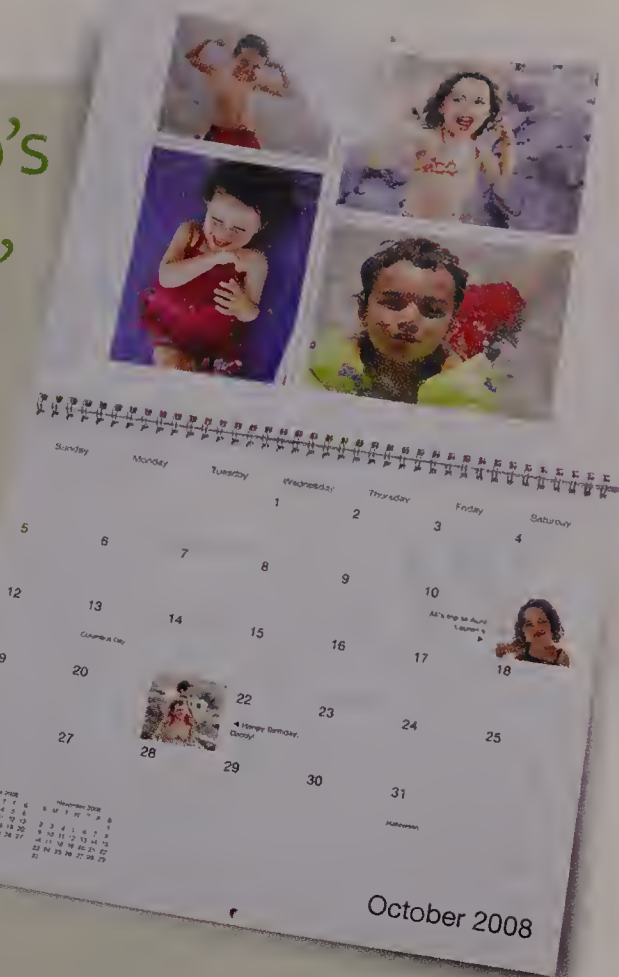
Secrets of iPhoto's Calendars, Cards, and Books

If you use Apple's iPhoto, you can create personalized calendars, books, and cards without leaving the comfort of your photo library. Now the latest version, iPhoto '08, ups the ante with larger calendars and more options for designing books. Use these tips to get the best results from your next iPhoto project. (For more iPhoto tips, see "Creative Shortcuts" on page 74.)

Use Vivid Photos Because of the printing process Apple uses for iPhoto print projects, you'll usually get the best results from photos that have vivid colors and plenty of contrast. If you use a photo with soft, muted tones (for example, a foggy lake at dawn), you may see subtle vertical stripes, or striations, in the printed result—particularly in calendars or full-page photos.

Edit Locally iPhoto '08 lets you optimize a photo for a particular project without having to change the original version in your photo library. That means you can bump up the sharpness and adjust exposure settings—often a good idea when printing—without affecting how the image looks in Web galleries or slide shows.

While designing a photo project, select an image and click on the Adjust button to access localized editing controls—including options for creating black-and-white or sepia-toned images. I recommend increasing the sharpness to improve the photo's clarity when printed, and perhaps bumping up the Exposure setting to give the photo a bit more punch (take care not to go too far, lest bright areas of the photo wash out to pure white). To crop a photo that you've added to a print project, click on it once and then use the controls that



appear above the photo to zoom in and reposition it within the frame.

Think Smart Typographers and designers know the difference between those heinous typewriter quotes (") and true opening and closing quotes (" and "), also known as *smart quotes*. Alas, iPhoto does not. If you want professional-looking text in your project, you'll need to type it yourself. To create opening and closing single quotes, press option-right angle bracket (]) and shift-option-right angle bracket, respectively. For opening and closing double quotes, press option-left angle bracket ([) and shift-option-left angle bracket, respectively.

Kill the Marketing Every Apple calendar, book, or card displays an Apple logo and the text "Made on a Mac" somewhere—it's on the back of a greeting card, for example, and on the inside back cover of a book. If you'd rather not provide the free advertising, click on the Settings button and then deselect the Include Apple Logo option.—JIM HEID

while a pack of 100 MiniCards is \$20.

Transferring your photos to Moo is a breeze. You can upload the images directly from your computer, or if you are part of a Web community such as Flickr, Facebook, or Vox, you can access your online photo albums right from the Moo interface. You're not limited to using your

own snapshots, either. If you prefer, you can choose professional artwork from several graphic designers, including Marc Johns and Blanca Gomez, or you can select from various photo themes, such as cats, skies, and flowers. ☒

Kelly Turner is a senior editor at *Macworld*.



Improving AirPort's Range

When Wi-Fi nodes are too far apart, network performance suffers **BY GLENN FLEISHMAN**

Wi-Fi networks can reach only so far. The range of wireless equipment—such as the radios and antennas that are built into consumer equipment like the AirPort Extreme Base Station—can vary from network to network, even minute to minute. But when one node of a Wi-Fi network is too far from another, communications between the two break down, and your network doesn't work.

While Wi-Fi signals are supposed to reach 150 feet in any direction from a gateway, that optimistic number is rarely reached indoors. One common cause is *absorption*. Building materials between two points can soak up so much of the signal that one device can't detect another. (Brick is particularly bad for Wi-Fi because brick retains water, which readily absorbs Wi-Fi signals.) As a result, a gateway that delivers a perfect high-speed connection to a laptop from 500 feet away when it has a direct line of sight might be invisible to a laptop that's 50 feet away when there's a brick wall between them.

Diagnosis

There are two main indicators that your AirPort network is having range problems. First, Wi-Fi net-



works you know are there don't show up in the AirPort menu. Second, when you do connect to a network, the AirPort icon in the system menu bar shows just one or two signal-strength bars and frequently slips to no bars (a grayed-out icon).

You can also check signal strength with iStumbler (donation requested; www.istumbler.com), a utility that shows you a list of all in-range Wi-Fi networks and Bluetooth devices. Among other details, iStumbler shows you percentage values for the signal and noise of those nearby networks. If iStumbler shows a high noise value, then interference could be the reason you're having network problems. But if the noise value and the signal value are both low, then range is the problem.

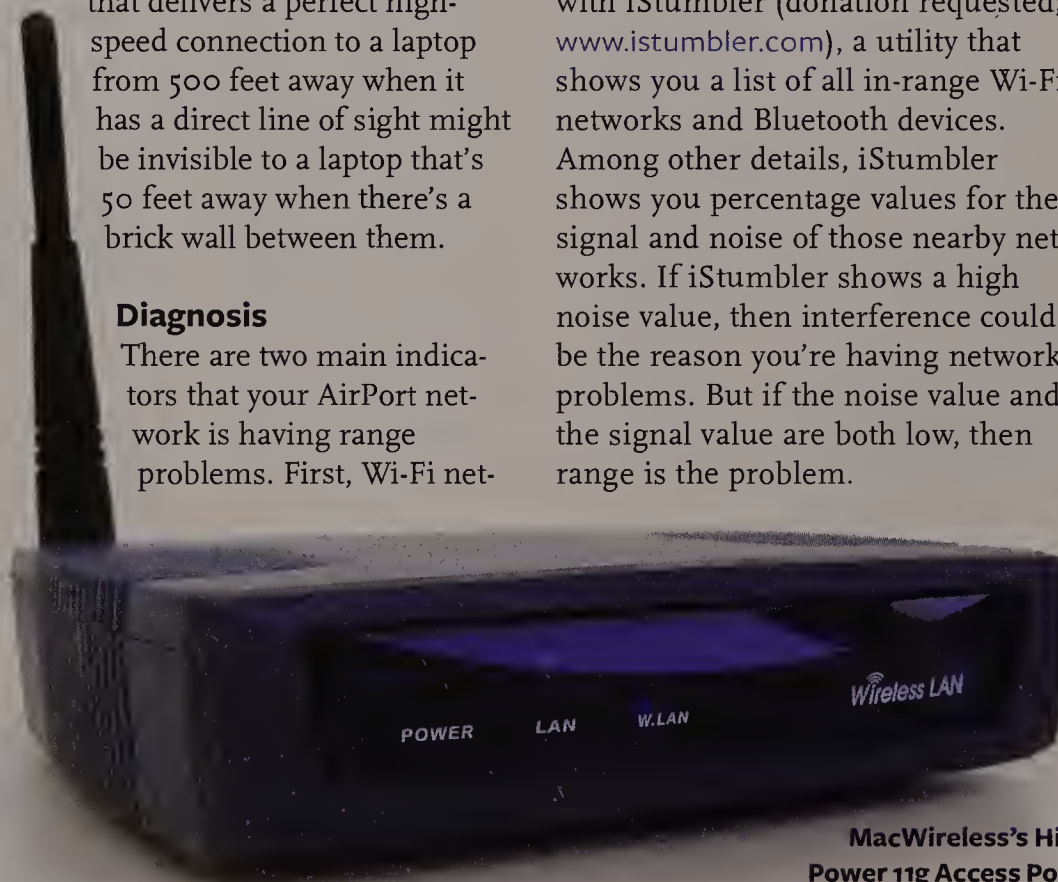
Solutions

If iStumbler indicates that you're having interference problems, you can solve them by following our advice from last month's *Mobile Mac* column (see "Troubleshooting AirPort Interference" at macworld.com/3152). If the problem really is range, there are several easy ways to solve it.

Upgrade Your Base Station Routers that are based on the Draft N specification (an early version of the 802.11n networking standard) incorporate MIMO (multiple input, multiple output) antenna arrays. MIMO can improve range (as well as speed).

The AirPort Extreme Base Stations (●●●●½: macworld.com/3109) released in 2007 use Draft N, and Apple claims that the standard has twice the range of its predecessor. In testing early this year, *Macworld* found that the range was indeed quite good.

Linksys and several other companies sell Draft N routers starting at \$100. Because those routers improve both transmission power and reception sensitivity, you can update just the gateway and continue using the older adapters on all your computers; the range of your network should still improve.



MacWireless's High Power 11g Access Point

Add an Antenna You could also install a large, strong antenna on your base station so that it could blast out more-powerful signals.

Many Wi-Fi gateways have antennas that you can unscrew and replace with another antenna that has a higher gain (produces a stronger signal). Hyper-Link Technologies (www.hyperlinktech.com) has been selling antennas, and providing compatibility information about which gateways and wireless cards they work with, for years. The information is a bit technical, but it's an exhaustive resource.

Apple has always kept its antennas inside the housing of its AirPort Base Stations; just a few of the 802.11g AirPort Extreme Base Stations came with an antenna jack for adding an external one. MacWireless (www.macwireless.com) has antennas, tools, and instructions for adding antennas to all AirPort models. MacWireless also offers a High Power 11g Access Point (\$180). This unit has a regular-size antenna but a much more powerful radio, which provides more than ten times the raw output power of most consumer gateways.

There is one downside to upgrading your antenna: while it can help your network, it can also mess up others. That's because nearby networks may pick up your signals, and their performance will degrade as they try to cope with the barrage.

Upgrade Your Radio If you have an older Mac without 802.11n built in, you can improve its range by attaching an 802.11n adapter. QuickerTek nNano USB adapter (\$65; www.quickertek.com), for example, works with any Mac running Mac OS X 10.3 or later. The company also has a CardBus card (\$65) and PCI Card (\$100) that work with PowerPC models running Mac OS 10.3.9 or higher, and upgrade kits for Intel Macs starting at \$100. Other World Computing offers three alternatives, each for \$68: a USB adapter (Mac OS X 10.3 or later, any model Mac), and a PCI Card and CardBus card (for PowerPC models).

Outside In

With the proliferation of both citywide and neighborhood-spanning networks, finding Wi-Fi service is becoming less of a problem. But it can be tough to get a consistently strong signal.

One way to improve reception is to point a bigger directional antenna toward the strongest local network signal. Hyper-Link Technologies and MacWireless, among others, sell such antennas.

Another approach, especially if you're hoping to bring the outside network into your home or office and then share it over Wi-Fi, is a Wi-Fi bridge. Wi-Fi bridges are designed to take a signal from one network source and redistribute it. They tend to be pricey, though, costing from \$100 to \$300, depending on features.

Ruckus Wireless (www.ruckuswireless.com) and PepWave (www.pepwave.com) both provide bridges designed to improve the performance of your Wi-Fi network when you're connected to a larger network.

PepWave's Surf AP series (starting at \$189) and Ruckus's MetroFlex Dual Zone (\$149) each create two virtual Wi-Fi networks with a single radio. Both devices vary in signal strength, using more power when transmitting and having more sensitivity when receiving data from far away, while also dialing down during interactions with computers and devices on your local network.



**PepWave's
Surf AP**



**Ruckus's MetroFlex
Dual Zone**

All of these adapters have one important limitation: They operate only in the crowded 2.4 GHz band. But they can still improve range by transmitting farther and listening more carefully.

Add More Base Stations Another way to extend network range is to build a network with many base stations, all with the same network name. Wi-Fi adapters look for a network name, not a specific gateway. If one base station doesn't cover your home or office, perhaps two or five—or ten—might.

You could deploy a bunch of AirPort Base Stations, but that'd get expensive. Other 802.11g and 802.11n Wi-Fi gateways cost as little as \$30 to \$100 each.

In a standard network of multiple base stations, you configure one base station as the gateway, plugged into a broadband router. You connect additional base stations through Ethernet, or wirelessly through WDS (Wireless Distribution System), which is built into the AirPort Extreme Base Station and other gateways.

To make the multiple-base-stations setup work, you need to configure the main base station as a gateway to your

broadband connection. You then configure the other base stations to pass traffic in bridge mode; that way, they leave the responsibility for assigning IP addresses to the primary base station. To set this up with the AirPort Extreme, go to AirPort Utility's Internet pane, select the Internet Connection tab, and select Off (Bridge) from the Connection Sharing menu. Plug the WAN (wide area network) port from these subsidiary base stations into a LAN (local area network) port on the primary base station, or into an Ethernet switch that's plugged into the LAN port. For other base stations, you'll have to check the manual.

As an alternative, you could use home power-line networking to connect base stations (again, see "Troubleshooting AirPort Interference" at macworld.com/3152 for more information). Many power-line vendors offer combos consisting of a wireless access point with a built-in power-line adapter; that way, you can extend your network without using WDS or Ethernet. ☒

Glenn Fleishman is the author of *Take Control of Your 802.11n AirPort Extreme Network* (TidBits Publishing, 2007; www.takecontrolbooks.com).

Tracking Down Trouble with the Console

How to use OS X log files to troubleshoot your Mac **BY KIRK MCELHEARN**

Your Mac talks to itself a lot. OS X takes copious notes on what its various parts are doing; your applications send a constant stream of status messages to the operating system, too. All these notes and messages are stored in log files, which can be really handy when you need to troubleshoot your Mac.

These logs are plain text files, which you could view with TextEdit or any other text editor. But Mac OS X's Console (found in /Applications/Utilities) is a much better tool: it not only lets you read your system's logs, it helps you find and monitor them and filter their contents.

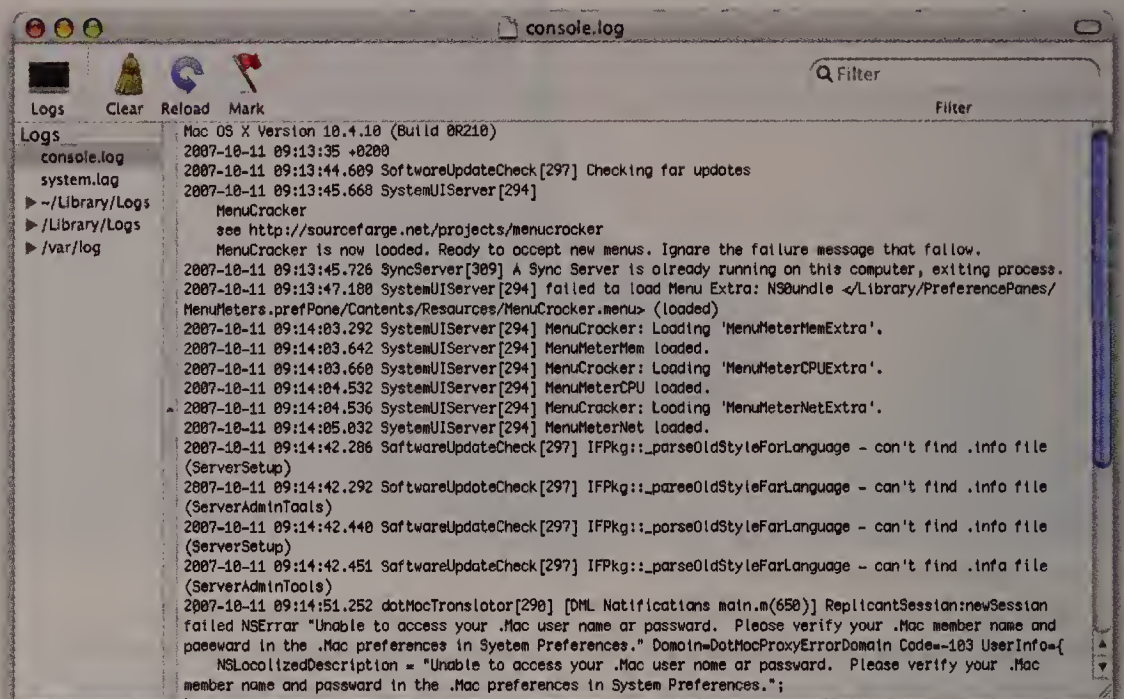
The Basics

When you open Console, it automatically displays one of the most important log files: `console.log`. For most troubleshooting, this and `system.log` may be all you need. (To view `system.log`, click on the Logs icon in the toolbar, then click on `system.log` in the sidebar's Logs list.) These logs display their information in reverse chronological order; newest entries are at the bottom, and as entries get added, the log scrolls to always show the last line.

If you have problems with a specific program or with Mac OS X, start by checking `console.log`. One of the handiest ways to do so is to type the name of the program that's having problems, or a description of the problem, into the Filter field in Console's toolbar. For example, when I was having trouble syncing some data to my .Mac account, I searched for `sync` and found the following log entry:

**2007-09-23 14:06:10.433
cSync[1565] Unable to copy dbBlob for
keychain 'login.keychain': -25294**

I can't pretend that message meant much to me, but something was clearly



Deciphering the Gibberish Log files aren't exactly easy reading. But if you can find the relevant text and then do a Web search on it, you're likely to find an explanation.

amiss. So I went to Google and searched for the text *Unable to copy dbBlob for keychain*, which led me to a forum thread that suggested a solution. That's the general rule for using log files to troubleshoot your Mac: select the log file text that looks descriptive (yet doesn't include any personal information), do a Web search for it, and you may find forums, knowledge bases, or support sites that'll help you resolve the problem.

In another example, a friend of mine was having problems with Mail crashing. I asked him to send me his `console.log`. (That's the other great thing about log files: they're easy to pass around.) It showed that Mail was trying but failing to load several plug-ins, and that failure was causing the crashes. My friend had been trying out some software that installed Mail plug-ins. But when he deleted the software in question, he didn't delete the plug-ins from *your user folder*/

Library/Mail/Bundles. Since `console.log` had pinpointed the problem, I was able to tell him what to delete, solving the problem.

Lots of programs write to `console.log`. For example, if you use Alsoft's \$100 DiskWarrior (macworld.com/2503), and you have it set to run automatic hardware diagnostics on your hard disks, it'll generate a long list of log entries, which can help you diagnose disk problems. Apple's Disk Utility also writes log entries to `console.log` whenever you create a disk image or format a disk. Finally, if your Mac is having trouble with a peripheral, it may be having problems loading drivers for the device; `console.log` should record those snags. (For more on that, see Ted Landau's discussion at macworld.com/3151.)

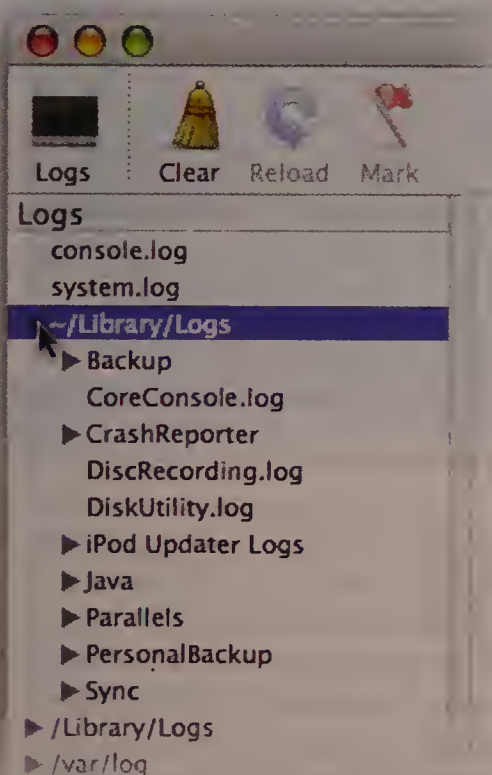
While `console.log` tracks events in your particular user account, `system.log` tracks events affecting your Mac as a whole. You'll see, for example, that a number of entries are added to it each

time you start up your Mac. Scanning through system.log, you'll find entries for drivers and kernel extensions that load when you boot. It's useful to review system.log for device drivers or programs you no longer use; you can then track down and remove the software elements you don't need. If you're having a problem with a hardware device and you don't find any trace of it in console.log, check system.log to see if its driver is loading; if not, you may need to reinstall the driver. As with console.log, you may not always be able to understand system.log entries, but they can point you in the right direction.

Other Logs

At times console.log and system.log won't tell you what you need to know. That's when you should click on the Logs icon in Console's toolbar and search for the other log files OS X maintains.

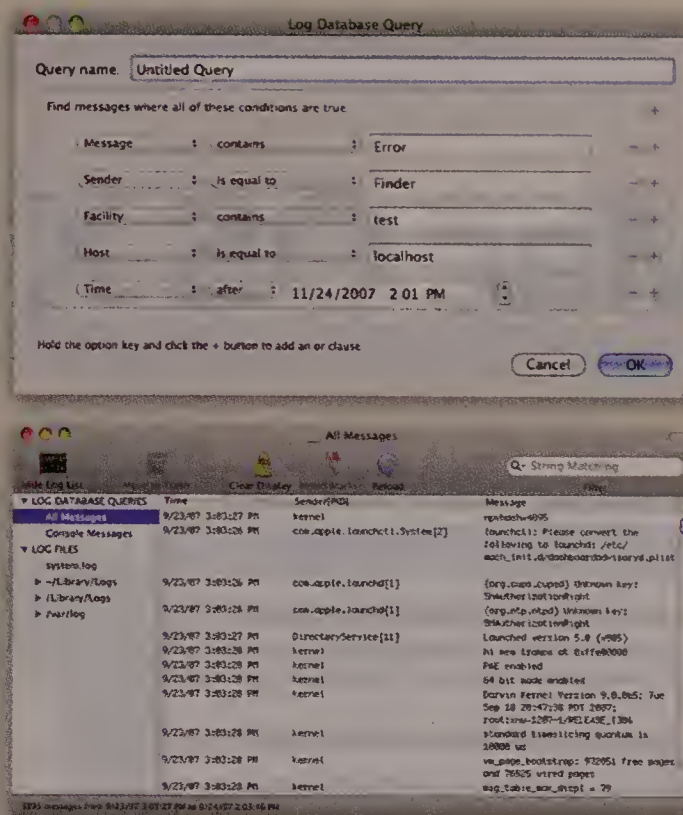
The first entry after console.log and system.log is ~/Library/Logs. Click on the disclosure triangle, and you'll see a list of logs and other folders, all in your home folder; they track activity just within your own user account. The other logs in that list, /Library/Logs and /var/log, contain systemwide logs. (Note that your personal console.log file



Other Logs Console.log and system.log are the easiest log files to find, as they're the most commonly used. But other useful logs are hidden in Console's sidebar.

Leopard's Spots in Console

If you've upgraded to Leopard, you can take advantage of a new feature that makes it easier to spot specific log entries. Leopard's version of Console lets you save log queries. These smart queries enable you to build a filter and look at only those log entries that match your filter. To create a new query, choose File: New Log Database Query, and then enter the criteria you want. When you save the query, it will appear in the Console sidebar, right above the list of log files; you can rerun it whenever you want.



is actually located in /Library/Logs/Console/your user ID; that ID will be 501 if you're the only user of your Mac and a higher number for other users.)

You'll need to investigate these other logs when some piece of software crashes for no apparent reason. Your Mac stores special types of logs, called *crash logs*, for each program that quits unexpectedly. In Console's Logs list, click on the disclosure triangle next to ~/Library/Logs, and then select CrashReporter. There you'll see a list of all the programs that have crashed on your Mac. Click on one of these logs to see its contents. Unless you're a programmer, those contents will look like gibberish. But, as with console.log, you can glean some useful bits of information and then find out more online.

If you manage many Macs, you'll also want to know about secure.log, located in /var/log. It records every time a user authenticates as an administrator, such as when installing software or changing certain system preferences, as well as each time a user runs the **sudo** command in Terminal (or via a remote connection). This log can tell you if users are exceeding their

authorizations and what authorized users are doing. It does, however, have its limits; for example, while it can tell you which users are installing certain programs and when, it can't tell you which programs they installed.

Process of Elimination

All of these logs can help you troubleshoot software and hardware problems. But given the many lines in console.log, it can sometimes be hard to find the specific entries that relate to the problem you're having.

There is, however, a work-around: if you're trying to isolate the cause of a specific problem, go to console.log, and then click on the Clear button in Console's toolbar; this clears the display of the log's entries. Next, reproduce the actions that caused your problem—launching the program, connecting the hardware device, whatever. That should generate new log entries in console.log (or one of the other log files I've described), preceded by a date stamp. In many cases, the cause of the problem will be right there. ☒

Kirk McElhearn writes about Macs and more on his blog, Kirkville.

Help Desk

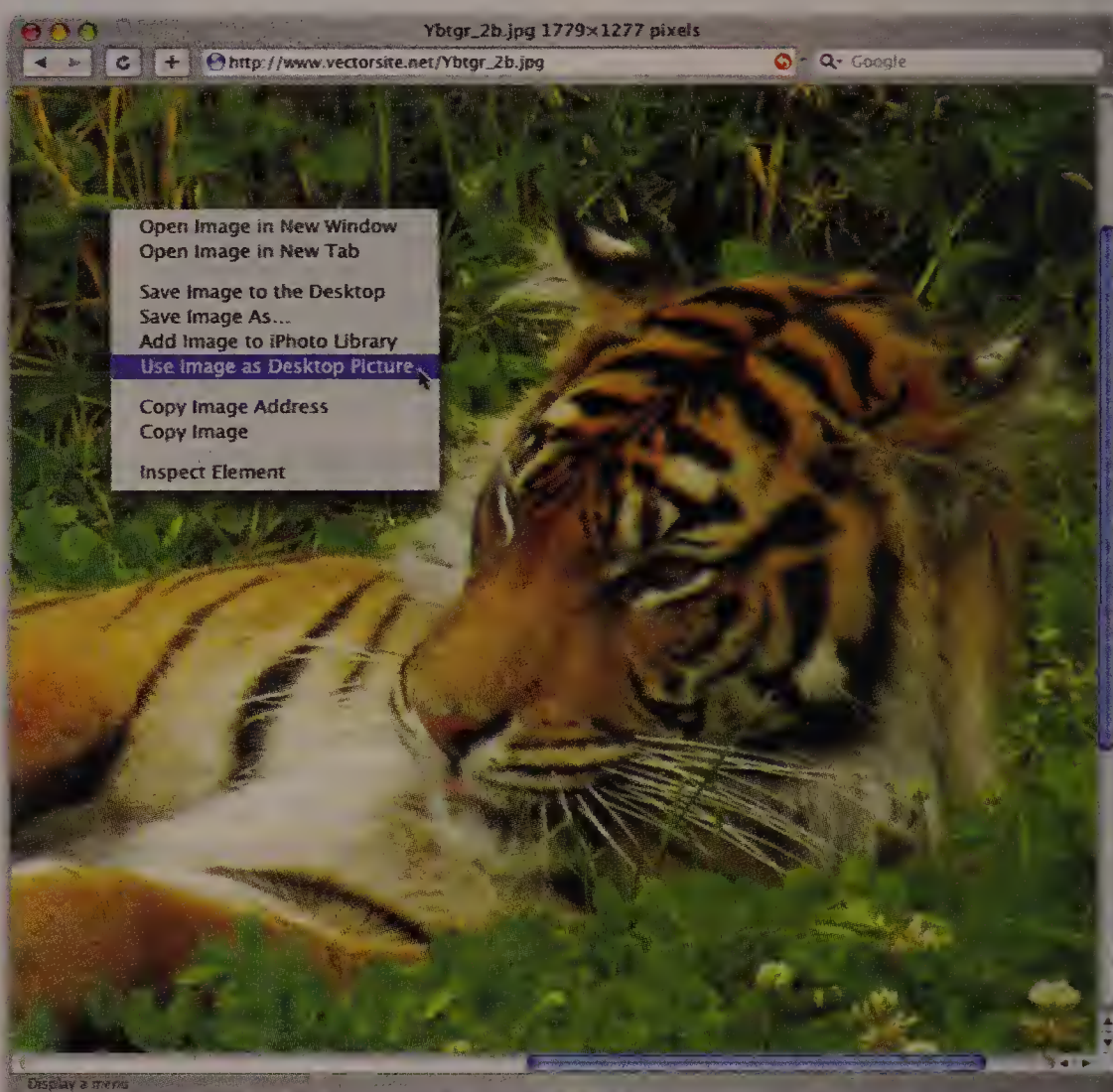
Mac OS X Hints

The insider tips you won't get from Apple **BY ROB GRIFFITHS**

Save Desktop Pictures with Safari

If you like to dress up your desktop, you may have envied an ability Windows users have had for years: using Internet Explorer for Windows, they can right-click on any image they see on a Web page and select Set As Background from the contextual menu. But now Mac users can do the same in Safari 3 (still in beta at press time).

Control- or right-click on an image (perhaps one from www.macdesktops.com) and choose Use Image As Desktop Picture from the contextual menu (see "Decorate Your Desktop"). Safari will download and save the image—you'll find it saved as Safari Desktop Picture.jpg in your *user folder/Library/Safari*. Then Safari will set the desktop to use the newly saved image. Keep in mind that if you use an image that's smaller than your monitor's resolution, you'll get some pretty ugly blurring, because OS X will attempt to expand the image to fill the screen. To prevent scaling, use images that are at least as large as your monitor's resolution, which you can see in the Displays preference pane.



Decorate Your Desktop Use the Safari 3 public beta to convert any image on a Web site into your desktop picture.

Have a hint to share?

Go to MacOSXHints.com to submit it. This column was based on tips provided by Daniel B. Ennis, Michael Martz, Pereceval

McElhearn, Henry Merriweather, Chris Shaffer, and anonymous contributors. Each month, the author of our favorite tip receives the *Help Desk* mug.



Jump to a Site's Subpages

To save you some typing, the vast majority of Web browsers will guess at a full Web address if you give them a partial one. Just type the name portion of the URL, leaving off everything else. For example, to get to Alex Ross's The Rest Is Noise blog, type **therestisnoise** instead of **http://www.therestisnoise.com**. When you press return, the browser will add

http:// at the front and **.com** at the end of the URL.

What's not so well known is that with many OS X browsers, you can do the same thing to get to a Web site's *subpages*. Let's say, for instance, that you want to jump directly to a collection of essays on Alex Ross's site. In many browsers, you can simply type **therestisnoise/essays** into the URL bar and press return, and the

browser is smart enough to add the **.com** before the first forward slash (and the **http://** at the beginning, of course). This trick works in nearly every OS X browser I've tested—the only exception was Mozilla's Firefox 2 (www.getfirefox.com), which ignored anything after the slash and just went to the home page of the domain. But Apple's free Safari 2 or 3 (www.apple.com/safari), The Omni Group's \$15 OmniWeb 5.5.4 (www.omnigroup.com), The Camino Project's free Camino 1.5.1 (www.caminobrowser.org), Opera Software's Opera 9.23 (www.opera.com), and Alexander Clauss's \$29 iCab 3.0.3 (www.icab.de) all jumped directly to the essays page.

Keyboard Tricks for iTunes Folders

Is your iTunes library filled to the brim? It's a good idea to organize your music and movies into playlists and then sort those into folders, subfolders, and sub-subfolders. For example, I have top-level folders for normal playlists and smart playlists, and then various subfolders based on genres, artists, and so on. Although that makes it easier to find what I seek, all the clicking required to navigate those folders can get tedious. These useful tricks can streamline the process.

Folders in iTunes work just like folders in the Finder's List view—when there's something inside, you'll see a small triangle to the left of the folder's name. Click on the triangle to reveal the contents of the folder. Click on it again to make the contents disappear. If you hold down the option key while clicking on any folder's

WHAT'S ONLINE

View .Mac Web Galleries as RSS Feeds If you'd like to subscribe to a .Mac Web Gallery through your RSS reader rather than iPhoto, here's how (macworld.com/3148).

Create Multiple Wake Schedules Wish your Mac would wake up later on the weekend than on a weekday? Make it happen with a little Unix magic (macworld.com/3149).

OS X 101

File Naming Dos and Don'ts

Every day you do this task without giving it a second thought: naming files and folders. Yes, it's easy to name things in OS X, but there's a bit more to it than meets the eye.

Don't Start with a Period If you try to use a period at the beginning of a file or folder name, the Finder will let you know that such a name is "reserved for the system" (it makes any file or folder whose name begins with a period invisible in the Finder).

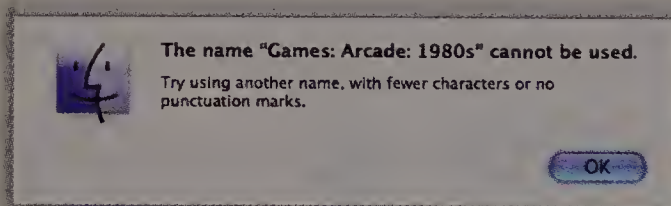
Don't Use a Colon You can't use a colon (:) *anywhere* in an item's name. That's because Mac OS X uses the colon to indicate a directory (or folder) in the OS X file system—for example, Applications: Utilities. If you try, you'll get a somewhat cryptic error message about the length of the item's name and its included punctuation (see "Illegal File Names"). The object's name won't change.

If you try to use a colon in a file name when you're saving from within a program, most of the time your Mac will replace the colon with a minus sign (-). In some programs, such as Microsoft Word, you'll just hear a beep and the colon won't appear.

Do Create Cross-Platform-Friendly Names Even though the colon is the only character you can't use in OS X, you might want to avoid some others: the asterisk (*), angle brackets (< and >), double-quotation marks ("), forward and backward slashes (/ and \), the semicolon (;), the pipe (|), and the question mark (?). Microsoft Windows XP reserves all these characters for its own use, so putting them in OS X file names may cause problems if you then send those files to Windows XP users.

Do Keep It Short The Mac limits how long your file name can be. Thankfully, the limit is quite high—255 characters. That's longer than this paragraph!

Do Give Descriptive Names Instead of pushing that 255-character limit, use names that make things easier to find. For instance, while Beef Recipe may seem like a perfectly adequate file name, it won't seem quite so precise when you reach Beef Recipe 17. Instead, try something more specific, like Braised Beef with Broccoli [5 stars].



Illegal File Names If you see this odd-looking error message, chances are you tried to use a colon (:) in a file's or folder's name. OS X forbids the use of some characters in names.

triangle, you'll expand (or collapse) not only the selected folder, but every subfolder within it, along with any other nested subfolders, and so on, all the way down through the hierarchy. So with one click, you can see (or hide) everything within a given folder.

There's one more shortcut that doesn't have a counterpart in the Finder. If you ⌘-click on an iTunes folder's triangle, you'll see that all folders at the same level as the folder you clicked on will expand (or collapse). Note that this action will not affect subfolders. If they were open when you collapsed all folders, for instance, those subfolders will still be open when you reopen the parent folder. This is handy if you've been drilling down into your folder structure and want to quickly get things looking nice and neat again—

⌘-click on the parent folder. Now if there were only a similar shortcut that would work on the piles of stuff on my desk!

Use iWork Effect Almost Anywhere

One of iWork '08's more powerful features is the Instant Alpha tool, available from the Format menu. Instant Alpha helps you turn an image's background transparent. Once you've done this, you can place the foreground object in front of different backgrounds. For instance, you might put the Statue of Liberty in the Los Angeles Harbor or place an image of your cat on the white background of your family newsletter. Instant Alpha is easy to use—click and drag to selectively turn portions of the background transparent. The results



POWER TIP OF THE MONTH

Trackpad Tapping at Login

Using my laptop's trackpad for clicking is one of those things that quickly became natural. If I'm ever using someone else's MacBook and he or she hasn't turned on this feature, I'll often find myself tapping on the trackpad in frustration, wondering what's wrong with it. Haven't enabled this feature? Go to the Keyboard & Mouse preference pane, click on the Trackpad tab, and select the Clicking option.



Outside of using someone else's Mac, there's one place where trackpad tapping is always disabled: the login window. True, there are other ways to navigate here—you can use the mouse, obviously, but you can also type the first letter in a user name to select it, press return, enter the password, and press return again. However, tapping on the trackpad is so ingrained in my brain now that I sometimes find my inability to tap here very annoying. As is so often the case, Terminal can help.

Open Terminal (/Applications/Utilities), copy and paste the following command from macworld.com/3147, and then press return:

```
defaults write /Library/Preferences/.GlobalPreferences  
com.apple.mouse.tapBehavior -int 1
```

The next time you log out (or call up the login window via Fast User Switching), you'll find that trackpad tapping works as it does everywhere else. If you'd ever like to disable this, repeat the above command, but put **0** at the end instead of **1**.

won't rival what you could do with hours of free time and Adobe Photoshop (which, of course, costs \$570 more than Apple's \$79 iWork '08 suite), but they're usually quite good.

Given how easy it is to use Instant Alpha, you might be tempted to use iWork '08 to prepare images for use in other programs. That usually works well, as long as you edit them in Pages '08 or Numbers '08. If you use Keynote, you'll find that when you copy and paste your image, you'll get either the original or the edited image with a white background.

Ken Drake over at KeynoteUser.com has come up with a couple of different workarounds for this problem. First, you can copy and paste the image from Keynote into Numbers or Pages and *then* copy it from there to its destination. Alternatively, you can add a new shape to your edited image. Pick any shape you like, though the rectangle works well, and use the Graphic Inspector to set its fill to None. Position this nonfilled object over your edited image,



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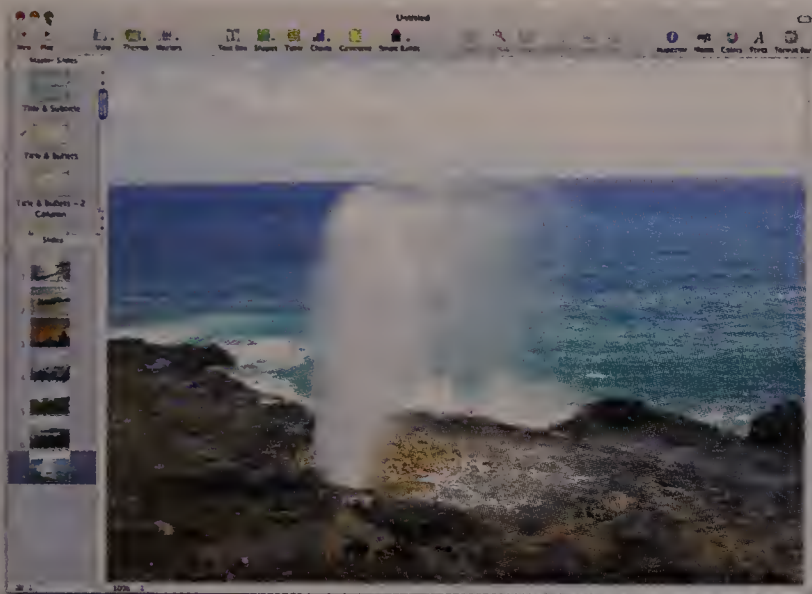
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and then select both objects and press ⌘-C. When you switch to the destination program and paste, you should see that the transparent background has been preserved. Note that the program you're pasting into must support alpha-channel images. If it doesn't (Microsoft

Word 2004 being a notable example), you'll see a black background behind the cutout image.

Quick Keynote Slides from Images

Have you ever had a series of screen-shots you needed to put into a presentation, or a series of photos you wanted to annotate with some of Keynote's tools? If so, you've probably spent a lot of time importing images, or dragging them into already-created slides one by one. But there's no need for such manual labor. Here's a quick trick using Keynote '08 (🔗; macworld.com/3043), part of iWork '08. This technique also works with Keynote 3.



Speedy Keynote Slides Need to turn a bunch of separate graphics or photos into a Keynote presentation? Just drag and drop them from the Finder directly to Keynote's Slides column.

First make sure you're in either Navigator or Light Table view (View: Navigator or View: Light Table); this tip won't work in Outline or Slide Only view. Switch to the Finder and select all the images you'd like to use to create your slides. If Keynote is in Navigator view, drag the selection into the Slides column. If you're using Light Table view, drag the images onto the light-table area. Keynote will then import your images and place each one into its own slide (see "Speedy Keynote Slides").

By default, the images are placed in front of any of the slides' fields (title, subtitle, bullets, and so on). You'll need to select each image and send it to the back (Arrange: Send To Back). If you'd prefer that the slides have blank backgrounds, create a new slide and set its master to blank (click on the Masters button on the toolbar and choose Blank). Then drag in your images. 📁

Senior Editor **Rob Griffiths** runs the MacOSX-Hints.com Web site.

The Missing Sync for iPhone

Get more out of your iPhone, and more into your iPhone — *fast*, so you can do something else more fun.

Sync iPhone notes, call log, and SMS messages to your Mac.
Transfer contacts, calendar and photos from your old smartphone to the iPhone.



Migrate to the iPhone

Move contacts, calendar, photos and more from your old Palm OS, Windows Mobile or BlackBerry smartphone to the iPhone. Once migration is complete we'll guide you to safely clear data from your old phone, making it ready to responsibly pass on.

Do U SMS?



The iPhone has a storage limit of just 1,000 text messages. Keep every SMS message by syncing them to your Mac where you can search and view them.

Call Log



Transfer the log of your incoming, outgoing and missed calls to your Mac. You can search or export for time-tracking and expense recordkeeping.

Note this!



Sync notes from the iPhone to your Mac where you can do more with them in Bare Bone's Yojimbo, Microsoft Entourage, or Mark/Space Notebook.

Also Available

The Missing Sync for Windows Mobile

- Windows Mobile 6 Support
- Video, Call Log, SMS History
- SyncMinder



The Missing Sync for BlackBerry

- Sync Contacts & Calendar
- Create, Sort & Search Notes
- Photos & Music To Go



The Missing Sync for Palm OS

- HotSync Replacement
- Contact & Calendar Sync
- Video, Photos & Music



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Mac 911

Solutions to your most vexing Mac problems **BY CHRISTOPHER BREEN**

Make Your Own System Alerts

Q: It used to be so easy to create your own system alert sound right in Mac OS. You'd click on New and record the sound through the built-in microphone. But those days are over. What program would you recommend for doing this now?

Jim Winski

A: You can still create your own system alert sounds. It's so much more personal, after all, to hear your two-year-old shouting "No!" whenever you have a preference window open and attempt to use its associated program. If you've purchased a new Mac in the past few years, you already have a program that can help—GarageBand (in /Applications).

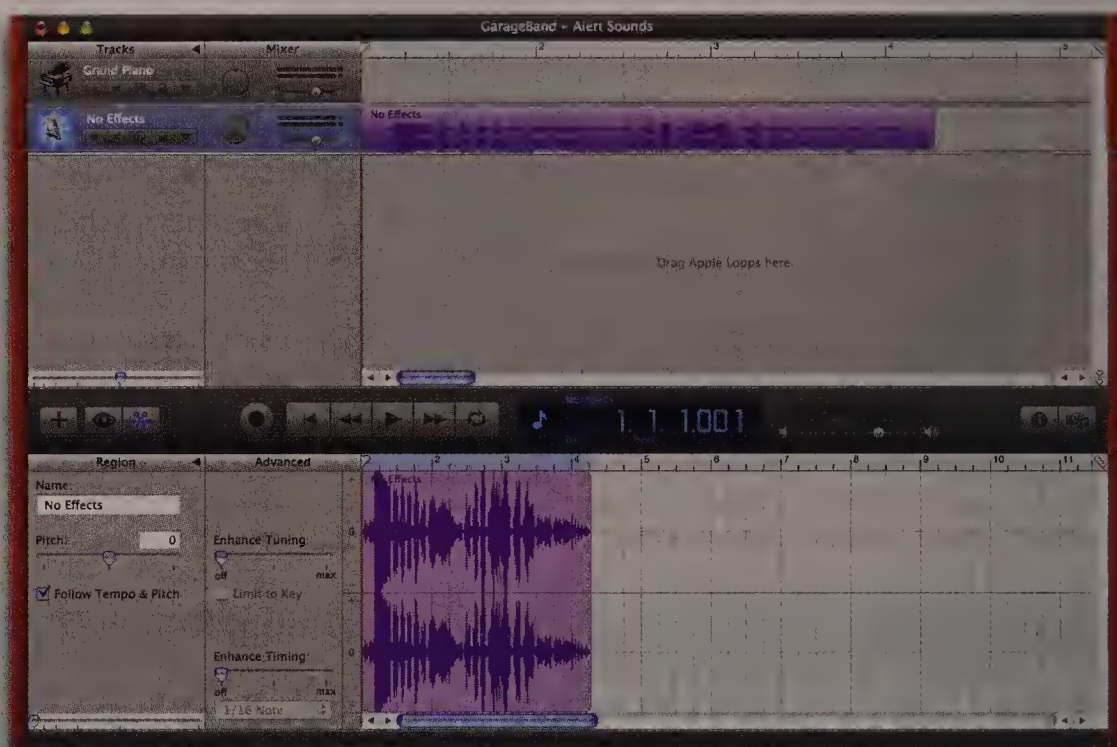
Launch it, create a new music project, and click on the plus-sign (+) button in the lower left corner of the window. Choose the Real Instrument Track option and click on Create. Now you can record your voice through a microphone attached to your Mac or through your Mac's built-in microphone, if it has one. Click on the red record button, make the sound, and then click on it again to stop (see "Record an Alert"). Next, trim the track to your satisfaction by dragging the edge of the clip to the desired length.

To use a clip as an OS X alert sound, you must save it in AIFF format. It doesn't need to be a fancy stereo file—a mono 22.05kHz file will work, too.



Have a problem?

Go to the Mac 911 forum (macworld.com/2467) for help with your misbehaving Mac or applications.



Record an Alert If OS X's default alert sound is too impersonal for your taste, use GarageBand to record your own.

How you export your sound as an AIFF track depends on what version of GarageBand you have. In GarageBand 3 (the version that was part of iLife '06), choose Share: Send Song To iTunes. The track will be exported as an AIFF file and added to your iTunes library. Switch to iTunes, control-click on the track, and then choose Show In Finder. For your custom sound to appear in the Sound Effects area of the Sound preference pane, you must copy the AIFF file to *your user folder/Library/Sounds*. It won't appear until you've quit and relaunched System Preferences.

In the latest version of GarageBand, you can skip some of this rigmarole by choosing Share: Export Song To Disk. Make sure the Compress check box is *not* enabled, and GarageBand will export the file as AIFF. Again, copy the file to *your user folder/Library/Sounds*, and it will become part of your Mac's

repertoire of alert sounds. You will then be able to choose it from the list of alert sounds in the Sound preference pane.

Another Easy Option If you're intimidated by GarageBand (or you don't have a copy of it), download Ben Shanfelder's dead-simple audio recorder called, aptly enough, Audio Recorder (free; macworld.com/3142). From its pop-up menu, select Edit Profiles. In the Profiles window that appears, choose AIFF from the Format pop-up menu. Click on Audio Recorder's Record button and you're good to go. Audio Recorder doesn't include any tools for editing recordings, so get it right or be prepared to import your clip into GarageBand or another audio editor for editing.

Spoofed by Spammers

Q: Someone is sending spam to Russia using my .Mac e-mail address as the Sent From address. As a result, my inbox is constantly receiving Undeliverable

Mail messages. What can I do without changing my account name?

Via the Internet

A: Nearly all of us have had an e-mail address *spoofed* by spammers, meaning that someone pretends messages are coming from the account by using it as the return address. Don't take it personally—it's a regrettable downside of the Internet age in which we live. With some careful filtering, you can help keep the bounced-back messages at bay.

If you're using the Web mail feature that's part of Apple's .Mac service (\$100 per year; www.mac.com), you'll be pleased to know that Apple now offers junk-mail filtering for it. To switch it on, log on to .Mac, click on the Mail link, and click on the Preferences link on the resulting .Mac Mail page. In the General tab, select both the Enable Junk Mail Filtering option and the Automatically Move Messages Marked As Junk To The Junk Folder option.

If you're using Apple's Mail to retrieve your .Mac mail, Apple suggests that you open Mail's preferences, click on the Junk Mail tab, and select the Enable Junk Mail Filtering option. Next, click on Accounts, select your .Mac account, and click on the Mailbox Behaviors tab. Enable the Store Junk Messages On The Server option here. Mark these bounced messages as junk, and they should be diverted to the Junk folder.

As an extra measure, I'd suggest creating a rule or two in whatever e-mail client you use. These will ensure that the bounces fly straight to a junk folder you create. For example, you could create a rule that goes something like this:

**If Subject Contains
Undeliverable Mail**

Then Move Message To Junk

Essentially, you're looking for something uniquely identifiable about these messages that will allow the program to snag them. You'll want to peruse this folder from time to time in case you've received a legitimate bounce.

Better yet, if you're willing to spend a little bit of money, you can catch those bounced messages and most other spam by using a third-party spam filter. I've tested nearly all of them (go to

TOOLS OF THE TRADE

Make the Most of .Mac

Apple has expanded its Web service, .Mac (www.mac.com), to include greater storage and transfer limits (10GB and 100GB, respectively) and support for personal domains. Given these welcome additions, here's how to take advantage of the best of .Mac. If you've been paying \$100 a year just to post pictures of your kids online, you can get more for your money.

Use .Mac Mail Aliases Although the spam filtering in .Mac's Web mail isn't good enough to lure me away from my Gmail account, I do like the five disposable e-mail aliases that .Mac lets me create. For example, I can give an online commerce site my address as example_alias@mac.com, and if any spam directed to that address appears in my inbox, not only do I know not to shop with that company again, but I can also delete that alias.

Access Everything from the Menu I use .Mac less than I should mostly because I'm put off by the idea of having to traipse from one end of the .Mac Web site to the other to accomplish routine tasks. Thanks to Infinite Nexus Software's free dotMac Menu (macworld.com/3144), those days are over. This little utility places an item in your menu bar that swiftly transports you to such common .Mac areas as your .Mac address book, Web mail, iCards, and bookmarks. At a glance, you can see how much of your .Mac storage space you've used and how much remains.

Don't Forget Backup I'm always amazed by the number of .Mac subscribers who've forgotten that the money they plunked down for this service also bought them an excellent backup program. There are more powerful and—thanks to Leopard's Time Machine—more convenient tools than Apple's Backup, but few are as easy to configure and operate. Granted, Backup won't restore files as slickly as Time Machine, but, unlike that tool, it also works with your iDisk and a USB drive connected to an AirPort Extreme Base Station.



com/3143) and have found C-Command's \$30 SpamSieve (★★★★; macworld.com/2671) to be the most effective.

Eternal (Document) Life

Q: I want my documents and notes to last a long time—forever, in fact—but don't know which formats will stand the test of time. Should I save in Microsoft Word's .doc format? What about plain text (.txt)? Currently, I'm writing and saving everything in Rich Text Format (.rtf), thinking this is a universal standard. I want a format that will really last, so that 50 years from now I'll be able to access my documents written waaaay back when.

Christopher Hosford

A: Plain text (.txt) is your best bet. You can unearth documents saved as plain text 20 years ago and still open them today. The downside of plain text is that you get minimal formatting—line breaks and little else. So your words will likely be there, but they won't be presented in an attractive package.

I'm also going to put my money on Adobe's Portable Document Format (.pdf), for this important reason: It's what governments use for countless forms. The wheels of bureaucracy turn extremely slowly (when they turn at all or in a forward direction), and once a bazillion pieces of government paperwork have been converted to PDF, it's going to take a major miracle for a new format to displace PDF.

Finally, if your words are that important to you, may I suggest that you also save them in physical form? If you've seen *Planet of the Apes*, you understand that our civilization could one day revert to a nontechnical, agrarian society—with or without Charlton Heston's help. I'm not anxious to see more trees slaughtered than necessary, but you might want to take your very best work, print it on archival stock paper with archival ink, and place it in a protective binder or case. It may not be the flashiest way to preserve your ideas, but it's one that has worked for countless generations.

A Trash Can Gone Astray

Q: I recently reinstalled all my software, including OS X. Everything is working fine, but for some reason I no longer have a Trash folder inside Apple's Mail. What should I do?

Alexis Alvarez-Suzuki

A: You need to configure one of your accounts to use the Trash. To do so, choose Mail: Preferences, click on the Accounts tab, and select an account. Click on the Mailbox Behaviors tab. In that tab, enable the Move Deleted Messages To The Trash Mailbox option. Close the Preferences window, and you'll be asked to save your settings. The Trash mailbox should now appear in Mail's Mailboxes pane.

Find a Missing Dictionary

Q: I have Microsoft Word 2004 configured to check spelling automatically as I type. Yet now when I control-click on a word such as *iPhone* to add it to Word's dictionary, the Add option is grayed out. Why did this stop working?

Don Strickland

A: Your copy of Microsoft Word 2004 (1106) has lost track of its custom dictionary. To help it find its way, select Word: Preferences. In the window that appears, choose Spelling And Grammar and then click on the Dictionaries button. Click on the Add button in the Custom Dictionaries window and then follow this path: *your user folder/Library/Preferences/Microsoft*. Select the Custom Dictionary file in that folder, click on Open, and then click on OK as many times as necessary to close the window. Your dictionary should now reappear. If you don't find a Custom Dictionary file, it was likely moved or vaporized. If a search turns up nothing, create a new file by clicking on the New button in the Custom Dictionaries window.

You Say Tomato, Word Says Tomahto

Q: My Microsoft Word 2004 dictionary decided about a month ago that I should use all British spellings. When I look at my preferences, my custom dictionary appears to be set to English (US),

Bugs & Fixes

BY TED LANDAU



Stuck at the Blue Screen

After you update your Mac to Mac OS X 10.5 (Leopard) and restart, you might find yourself stuck at a blue screen. Don't panic. The likely cause is an old version of Unsanity's free Application Enhancer (www.unsanity.com). To fix the glitch, either reinstall Leopard using Archive & Install or restart your Mac in single-user mode and delete the problematic files (see macworld.com/3181). You can head off the problem by uninstalling Application Enhancer (if you don't intend to use it anymore) before you update to Leopard or by making sure you have version 2.0.3 or later. Even with the newest version, programs that require Application Enhancer, such as WindowShade, won't work in Leopard. But at least the software will do no harm while you wait for a Leopard-compatible update.



A Case of iPhone Interference

Do you hear unusual static or other interference coming from your iPhone while listening to music or making a call? If your iPhone is tucked into a case that uses magnetic clips, they're the likely culprits. Remove the case, turn off your iPhone, and then turn it back on again. If the noise is gone, dump the case.



Disappearing Ringtone Bell

Want your iPhone to announce your best friends' calls with a snippet from their favorite tune? iTunes' new ringtones feature provides the tools for you to do this, but it's still rough around the edges. For instance, you should be able to tell if a song in the iTunes Store or your iTunes library is eligible for purchase as a ringtone by looking for a bell icon next to

the song's name. The problem is that an iTunes bug may make these icons randomly disappear. To fix this, select any song in a playlist and choose Store: Create Ringtone. If the option is grayed out, then you really can't make a ringtone. If it isn't, the missing bell icons for the selected song and all other eligible songs in the playlist should reappear as soon as you select the option. Updating to the latest version of iTunes may eventually squash this bug.



Random iPod Resets

If you have a new iPod classic or third-generation iPod nano, it may often freeze or reset when album artwork shows in the display. Apple's iPod Software Update 1.0.1 should fix these performance glitches. Connect your iPod to your Mac, select the iPod from iTunes' Sources list, and click on Check For Update to make sure that your iPod software is up-to-date. If it's not, click on Update. If you're unlucky, however, the problem will persist. In that case, your next step is to go to the Music tab, deselect Display Album Artwork On Your iPod, and click on Apply. If you prefer not to do this because you want to keep the artwork display, your remaining option is to use trial and error to determine which album covers are triggering the freezes. Delete the artwork for just those albums.

Senior Contributor **Ted Landau** is the founder of MacFixIt (www.macfixit.com) and the author of *Take Control of Troubleshooting Your iPhone* (TidBits Publishing, 2007). Share your problems at bugs@macworld.com or on Macworld.com's Mac 911 forum.

but it still insists that I spell *labor* as *labour* and *color* as *colour*. It's really annoying.

Tina Flammer

A: While we could write this one off as Word's attempt to adopt a tonier tone, I'm going to suggest instead that you're searching in the wrong location for the cause of this problem. The trouble lies not in the dictionary that you've chosen, but in your document's default language.

Open a document that exhibits this behavior—one that uses Word's Nor-

mal style or a template that you're using. Select all of the text and then choose Tools: Language. My guess is that the item selected in the resulting Language window is not English (US) but rather English (UK) or English (AUS). Choose English (US) and Word should return to good old Yankee spellings. ☒

Senior Editor **Christopher Breen** is the author of *The iPod and iTunes Pocket Guide*, second edition (Peachpit Press, 2007) and *The iPhone Pocket Guide* (Peachpit Press, 2007).

Plan for the future. (It's in January.)



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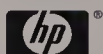
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Tuesday, January 15, 2008

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Wednesday, January 16, 2008

2:45 p.m. - 3:45 p.m.

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9:00 a.m. - 10:00 a.m.

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The Process of Elimination

Thursday, January 17, 2008

2:45 p.m. - 3:45 p.m.

Andy Ihnatko, Columnist, Macworld, The Chicago Sun-Times, The Mac Observer

Could you correctly identify one Mystery Apple Product out of a list of 50, if there was a fabulous prize riding on it?

Okay, then could you take a guess?

Well, what if I told you (in the strictest confidence, of course) that I usually have to carry a lot of stuff home from Expo as it is, and I'm really not eager to have to haul the fabulous prizes all the way back to Boston if nobody wins them, and thus I'm willing to help you narrow down the list with a short series of Apple and general-trivia questions that describe the Mystery Product, but not others?

Answer every question correctly and only one item will remain on the list. It's a game you can definitely win. It's just a simple process of elimination. But the first step is showing up.

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Choose a Power Tools topic and experience two days of top-notch training, enlightening discussions and one-on-one interaction with peers and industry experts. Build your skill set and knowledge on your favorite application or tool.

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Macworldexpo.com/macit

January 16 – 18

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- *Managing Macs in an enterprise environment*
- *A jump start for admin newbies*
- *Best Practices for 3rd Party Tools Integration*

Users Conference

Macworldexpo.com/users

January 16 – 17

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Inspire

Vision

Work

Create

Leopard

Click

Hands-On MacLabs

Macworldexpo.com/maclabs

January 14 – 18

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January 18

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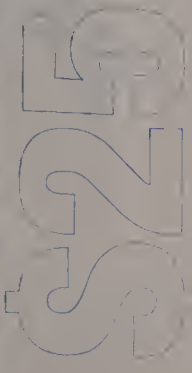



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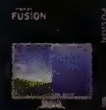


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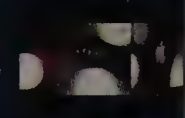


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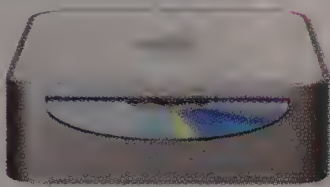
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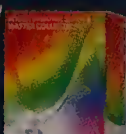


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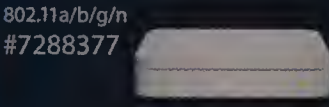
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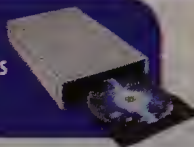
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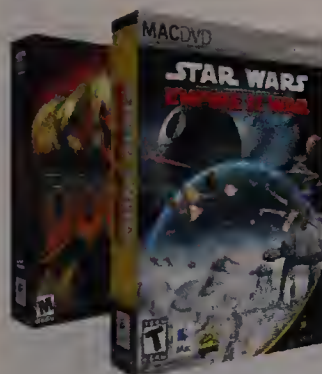
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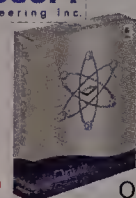
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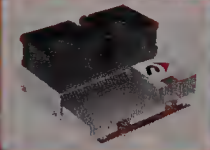
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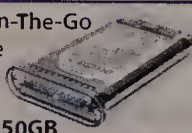
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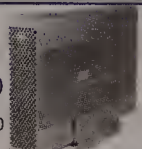
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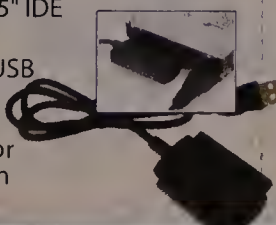
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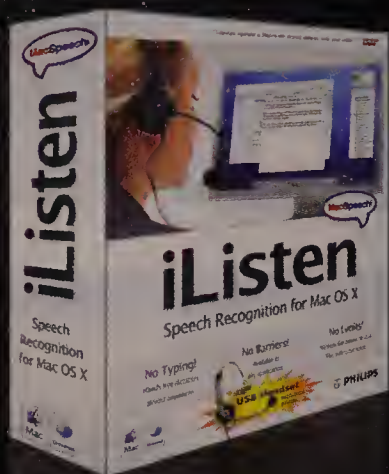
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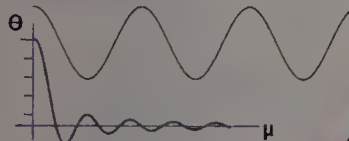
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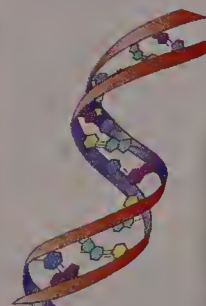
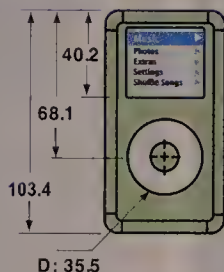
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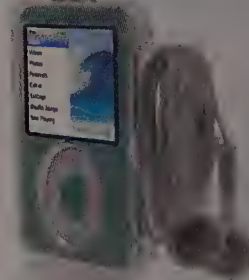


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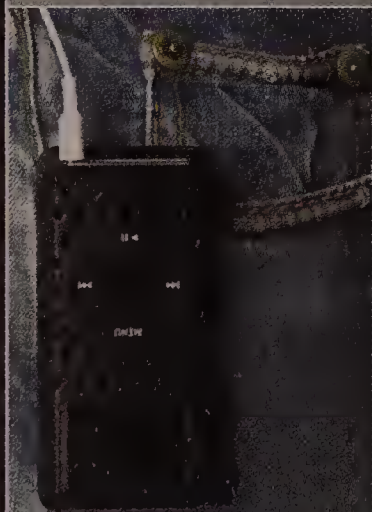
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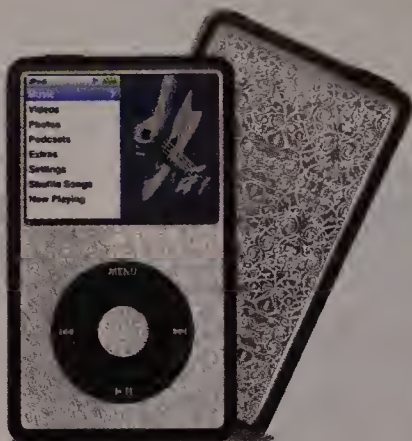
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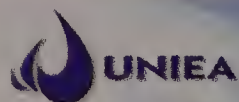
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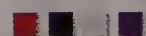
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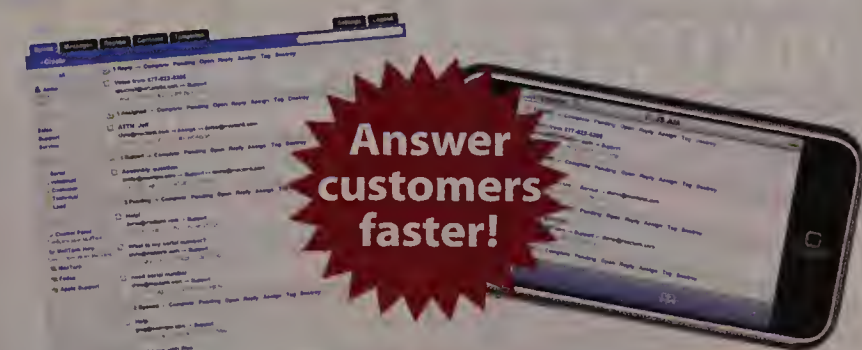
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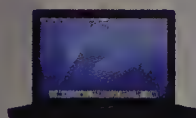
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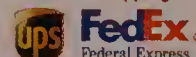
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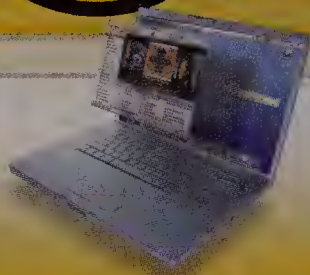
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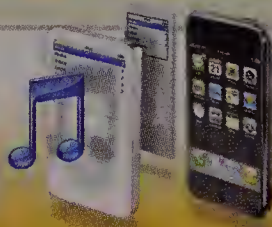
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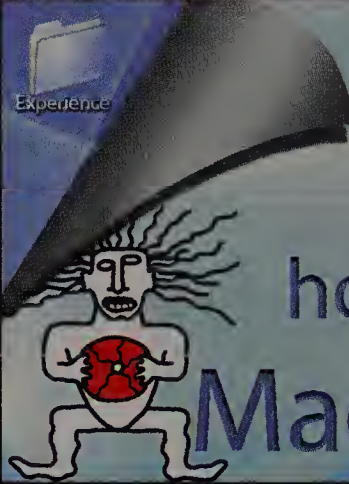
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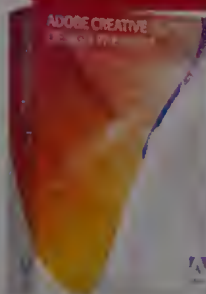


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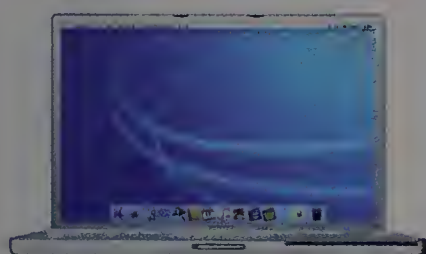
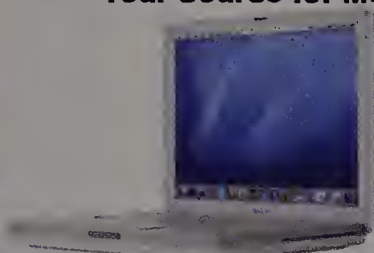
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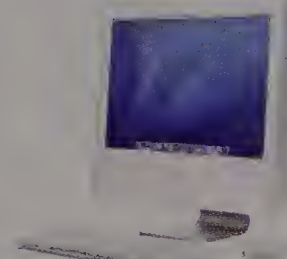
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What Leopard Is Worth

If you had to pay for Leopard's features individually, would you?

I really like Leopard, but it lacks that one sledgehammer feature that insists you immediately make this the first day of the rest of your Leopard life. Instead, Leopard is a game of inches. It doesn't have one or two major features that'll convince you to upgrade, but rather a half dozen or more minor ones. And the half dozen features that convince you will be different from those that convince me.

Feature by Feature

So should you upgrade? To answer that, try to picture Leopard as a collection of stand-alone programs, figure out how much you'd pay for the ones you want on their own, and then do the math. Here's my own appraisal.

Time Machine Leopard's built-in backup tool is definitely cool, even if I can't think of the last time I actually needed its "infinite undo" backup scheme. For my needs, Shirt Pocket's SuperDuper (♦♦♦♦♦; macworld.com/2325), which makes a complete bootable backup of my drive once a week and syncs my key files with my iPod every evening, is still a better alternative. I'd pay \$15 for it.

Spaces I love it: it's clean, it's simple, and it works fantastically. I tend to create a new Space for every program that works best in full-screen mode, like iMovie, InDesign, or Aperture. Still, it's hard to get people to cough up more than \$19 for a one-trick pony.

Back to My Mac Apple has finally done something ambitious with .Mac: Pop open your MacBook in a hotel room and—glory be!—your desktop iMac appears in the Finder. So hell, yeah: I'd pay real money for this—say, \$99—if it were a shrink-wrapped DVD at an Apple Store.

Mail It's truly a whole new program in Leopard, one that finally understands that a single message can represent a new contact, an appointment, a new item on the to-do list, and a note to yourself. Bundled together, Mail, iCal,

and Address Book could legitimately become a new \$59 iPackage.

iChat Like Mail, it has moved to the next level. With its ability to run presentations and its support for live screen sharing and chat recording, it has also suddenly become something that'd cause people to reach for their wallets and pull out \$39.

The Finder Apple apparently thinks it perfected its file manager in System 1.02, because we haven't seen a truly fresh take on it in more than 20 years. But we have seen steady evolution, and that trend continues in Leopard.

The Sidebar, for example, makes more sense now than it ever did, organizing volume and directory resources in a way that you can "get" immediately. I scoffed, sneered, and snickered at the idea of Cover Flow in the Finder. But I have to admit it: I was wrong. Cover Flow is perfect when I need to find a stray image in a gigantic folder full of

Let it be noted that the new translucent menu bar is a Costco-size box of Suck.



junk, and I have a lot of those on my Mac. And if I need a closer view, Quick Look lets me eyeball that picture in full-screen mode without having to drag it into Preview or something. So although my mouth goes a little dry when the subject of "a more iTunes-like Finder" comes up, I now have nothing but kind things to say as I pay my \$39.

All that said, let it be noted that the new translucent menu bar is a big Costco-size box of Suck. And look! There's a free prize inside: a travel-size tube of Fail. It's ugly and makes a critical part of the interface harder to see and use.

Spotlight What happened to the system-search tool is what should happen to every major new feature after its debut. The Spotlight team clearly listened to users. Search results appear in a Finder window. Search language is now more Google-like. You can do compound searches, as well as calculations and other search-fu. This version is also a lot faster than its predecessor. The new edition is clearly something for which you'd pay cash money—let's say \$29.

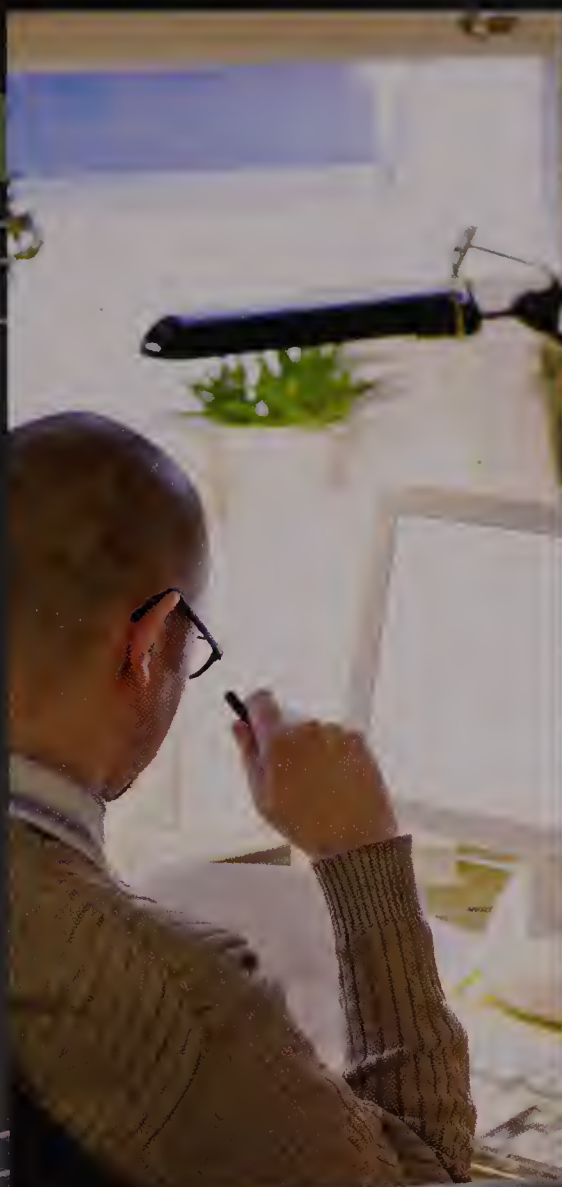
Adding It Up

All told, just these new Leopard features would have cost me nearly \$300 (\$311, if you throw in \$11 for that way-cool 3D holographic nebula on the box cover). And remember, there are dozens of features I haven't even mentioned here.

No matter how you work the numbers, though, it's pretty clear that Apple has yet again crammed way more than \$129 worth of value into its latest OS update. It's the magic number: just low enough so that most people will regard it as a reasonable expense without needing to resort to a lot of operatic hand-wringing over the decision.

See? It's much simpler when you do the math. ✕

Andy Ihnatko is a frequent *Macworld* contributor, and a technology columnist for the *Chicago Sun-Times*.



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